CHAPTER 11

MULTINATIONAL ACCOUNTING: FOREIGN CURRENCY TRANSACTIONS AND FINANCIAL INSTRUMENTS

ANSWERS TO QUESTIONS

Q11-1 Indirect and direct exchange rates differ by which currency is desired to be expressed in another currency. An indirect exchange rate is the number of foreign currency units that may be obtained for one local currency unit. The indirect exchange rate has the foreign currency unit in the numerator. As a fraction, the indirect exchange rate is expressed as follows:

$$\frac{\text{Number of foreign currency units}}{\text{One local currency unit}}$$

A direct exchange rate is the number of local currency units needed to acquire one foreign currency unit. The direct exchange rate has the local currency units in the numerator (the U.S. dollar for the direct exchange rate for the U.S. dollar). As a fraction, the direct exchange rate is expressed as follows:

$$\frac{\text{Number of local currency units}}{\text{One foreign currency unit}}$$

The indirect and direct exchange rates are inversely related and both state the same relationship between two currencies.

Q11-2 The direct exchange rate can be calculated by taking the inverse of the indirect exchange rate. Such a computation follows:

$$\frac{\text{Number of foreign currency units}}{\text{One local currency unit}} = \frac{\text{C\$1.3623 (Canadian dollars)}}{\text{\$1.00 (U.S. dollars)}}$$

The inverse of the indirect exchange rate is:

$$\frac{\text{\$1.00 (U.S. dollars)}}{\text{C\$1.36 (Canadian dollars)}} = \text{\$0.7340}$$

Q11-3 When the U.S. dollar strengthens against the European euro, imports from Europe into the U.S. will be less expensive in U.S. dollars. The direct exchange rate decreases, indicating that it takes fewer dollars to acquire European euros.

Q11-4 A foreign transaction is a transaction that does not involve the exchange of currencies on the part of the reporting entity. An example of a foreign transaction is the sale of equipment by a U.S. company (the reporting entity) to a Japanese firm that is denominated in U.S. dollars.

A foreign currency transaction is a transaction that does involve the exchange of currencies on the part of the reporting entity. An example of a foreign currency transaction is the sale of equipment by a U.S. company (the reporting entity) to a Japanese firm that is denominated in Japanese yen.

Q11-5 There are many types of economic factors that affect currency exchange rates, among which are the level of inflation, the balance of payments, changes in interest rates and investment levels, and the stability and process of governance. One example of an economic factor that results in a weakening of the U.S. dollar versus the European euro is a higher level of inflation in the U.S. relative to the inflation in Europe.

Q11-6 Assets and liabilities denominated in a foreign currency are measured according to the requirements in **ASC 830** for those arising from normal purchase and sale transactions, and by **ASC 815** for forward exchange contracts and hedging activities. **ASC 830** specifies that the valuation at the transaction date and each subsequent balance sheet date should be at the local currency equivalent using the spot rate of exchange. Forward exchange contracts are valued at fair value, typically by using the forward rate for the remainder of the term of the forward contract.

Q11-7 Foreign currency transaction gains or losses are recognized in the financial statements in the period in which the exchange rate changes. These gains or losses are reported on the income statement.

Q11-8 If the direct exchange rate increases, the Sun Company will experience a foreign currency transaction loss on its $200,000 account payable that is denominated in Canadian dollars. The increase in the direct exchange rate shows that the U.S. dollar has weakened relative to the Canadian dollar, requiring more U.S. dollars be used to pay the debt owed.

Q11-9 Four ways a U.S. company can manage the risk of changes in the exchange rates for foreign currencies are to (1) use a forward contract to offset an exposed foreign currency position, (2) hedge a firm foreign currency commitment as a fair value hedge, (3) hedge an anticipated foreign transaction as a cash flow hedge, or (4) speculate in foreign currency markets. One example of a U.S. company hedging against the risk of changes in the exchange rates for foreign currencies is to use a forward exchange receivable contract to partially offset the effects of changes in the exchange rates of the foreign currency liability.

Q11-10 An exposed net asset position occurs when a company's trade receivables and other assets denominated in a foreign currency are greater than its liabilities denominated in that currency. An exposed net liability position occurs if a company's liabilities denominated in a foreign currency exceed receivables denominated in that currency.

Q11-11 A difference usually exists between a currency's spot rate and forward rate because of the different economic factors involved in the determination of a future versus present rate of exchange. This difference is usually positive because of uncertainty and conservatism toward the future. For example, if inflation is assumed to continue into the future in the foreign country whose currency is being acquired, the forward rate will be higher than the spot rate because of the decreasing purchasing power of the currency. In addition, the time value of money factor will typically result in a higher forward exchange rate than the spot exchange rate.

Q11-12 (a) When an exposed foreign currency position exists, either an exposed net asset or net liability position is created. The forward contract is valued at fair value, usually by the forward exchange rate for the remainder of the term of the forward contract. The underlying payable or receivable from the foreign currency transaction is valued at the spot rate at the time of the transaction and adjusted to the current spot rate at each balance sheet date. (b) For a hedge of an identifiable foreign currency commitment, both the financial instrument and the forward contract aspects of the hedge are valued at the forward rate. An account, termed firm commitment, is created during the term of the forward contract to recognize the change in value of the financial instrument aspect of the firm commitment. (c) For a cash flow hedge of a forecasted transaction, the forward contract is valued at the forward rate, but the effective portion of the change in the fair value of the forward contract is recognized in other comprehensive income. The gain or loss on the re-measured foreign currency denominated account payable or receivable is offset from a reclassification of other comprehensive income so that there is no net exchange gain or loss from this hedge. (d) A speculative forward contract is not a hedge, but rather is a derivative that is valued at fair value by using the forward exchange rate for the remainder of the forward contract's term.

Gains or losses on these forward contracts are recognized in income in the period in which they occur.

SOLUTIONS TO CASES

C11-1 Effects of Changing Exchange Rates

a. The major factors influencing the demand for the U.S. dollar on the foreign exchange markets are (1) rate of inflation, (2) the interest and investment rates, (3) balance of payments, and (4) alternative investment opportunities. For example, the demand for the U.S. dollar weakens as inflation rates increase, interest rates decrease, the balance of payments becomes an increasingly high deficit, and alternative investments in other countries are more readily available.

b. As the dollar drops in value in relation to other currencies:

(1) Exports from the U.S. to the other country become less expensive and foreign buyers tend to increase their orders for U.S. goods. For example, assume the U.S. dollar weakened relative to a foreign currency unit (FCU) as follows:

direct exchange rate	=	\$0.50 / 1 FCU
after weakening	=	\$0.60 / 1 FCU

This would mean that a U.S.-manufactured machine selling for \$10,000 would cost the foreign customer 20,000 FCU before the weakening of the dollar (\$10,000 = 20,000 FCU x \$0.50). After the weakening of the dollar, this same machine would cost the foreign customer 16,667 FCU (\$10,000 = 16,667 FCU x \$0.60). This means a significant price reduction for the foreign buyer, thereby increasing the foreign demand for the U.S.-manufactured machine.

(2) The opposite effect occurs for the U.S. business firm as the dollar weakens. Foreign-made goods are now more expensive as it takes more dollars to acquire imports. For example, a foreign-made part selling for 10 FCU before the weakening costs the U.S. company $5.00 ($5.00 = 10 FCU x $0.50). After the dollar weakens, the same part now costs the U.S. company $6.00 ($6.00 = 10 FCU x $0.60). This increase of $1.00 per part is due solely to the weakening of the U.S. dollar relative to the foreign currency. Nevertheless, the U.S. business firm is subject to a very significant increase in the cost of its inputs.

c. As the dollar weakens, imports become more expensive for the U.S. consumer. In addition, as in case b(2) above, the U.S.-based manufacturer using foreign-made components for its products must now pass the higher costs on to its customers. Thus, U.S. consumers have to pay higher prices for their goods that have foreign elements.

C11-2 Reporting a Foreign Currency Transaction on the Financial Statements [AICPA Adapted]

a. Bow should report a foreign exchange loss on its 20X5 income statement. This loss is calculated by taking the number of pounds that are due in 20X6 and multiplying them by the change in the direct exchange rate from the transaction date to the balance sheet date. Since the U.S. dollar weakened, the direct exchange rate on December 31, 20X5, would be higher than the direct exchange rate on November 30, 20X5. The increase in the direct exchange rate means that more U.S. dollars would be needed to purchase pounds at December 31, 20X5, than at November 30, 20X5. Therefore, a foreign currency transaction loss should be reported in 20X5 because the exchange rate changed during 20X5. In addition, the accounts payable denominated in pounds should be reported at the exchange rate at December 31, 20X5. This means that the accounts payable recorded on November 30, 20X5, would have to be increased in order to reflect a weakening U.S. dollar.

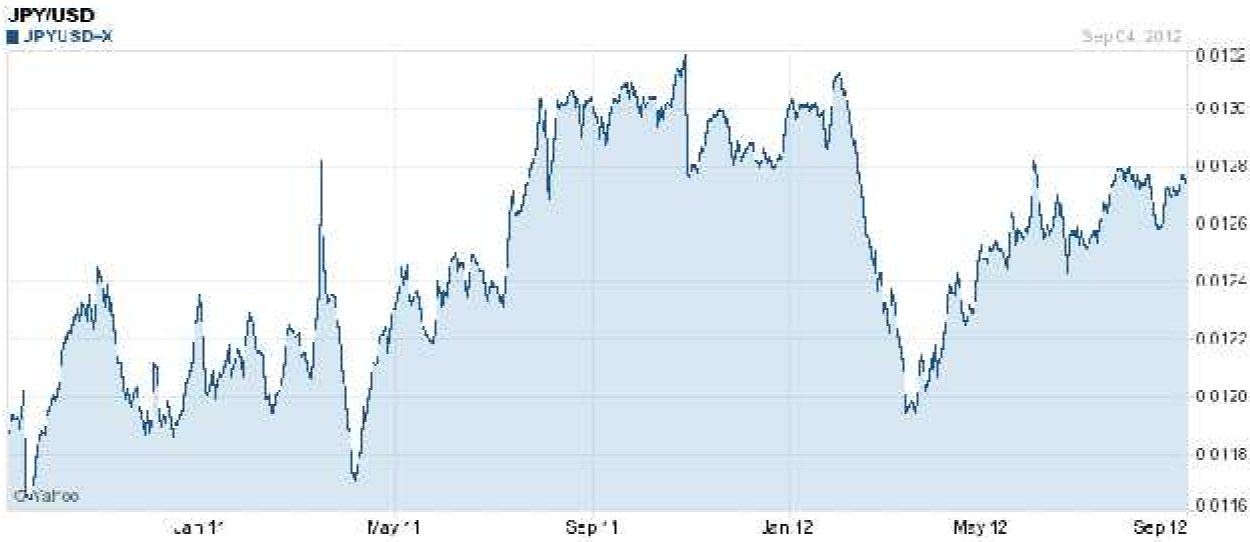
b. Reporting a foreign exchange loss in 20X5 is appropriate because, consistent with accrual accounting, the exchange rate on December 31, 20X5, should be used to value the accounts payable denominated in pounds. Bow's beliefs as to future exchange rate movements are excluded from the financial statements.

C11-3 Changing Exchange Rates

Note to Teacher: Currency exchange rates may be found in a variety of places on the Internet. A good site is http://finance.yahoo.com/currency-investing. Note that to obtain the direct exchange rate, students will have to specify the conversion as the foreign currency units into U.S. Dollars. After clicking the link for the conversion, both the current exchange rate and a chart of historical exchange rates are presented. There are various options for the length of time shown on the chart; the student should select the 2-year chart. Other sites can be found using a search engine and search terms such as "historical currency exchange rates."

C11-3 (continued)

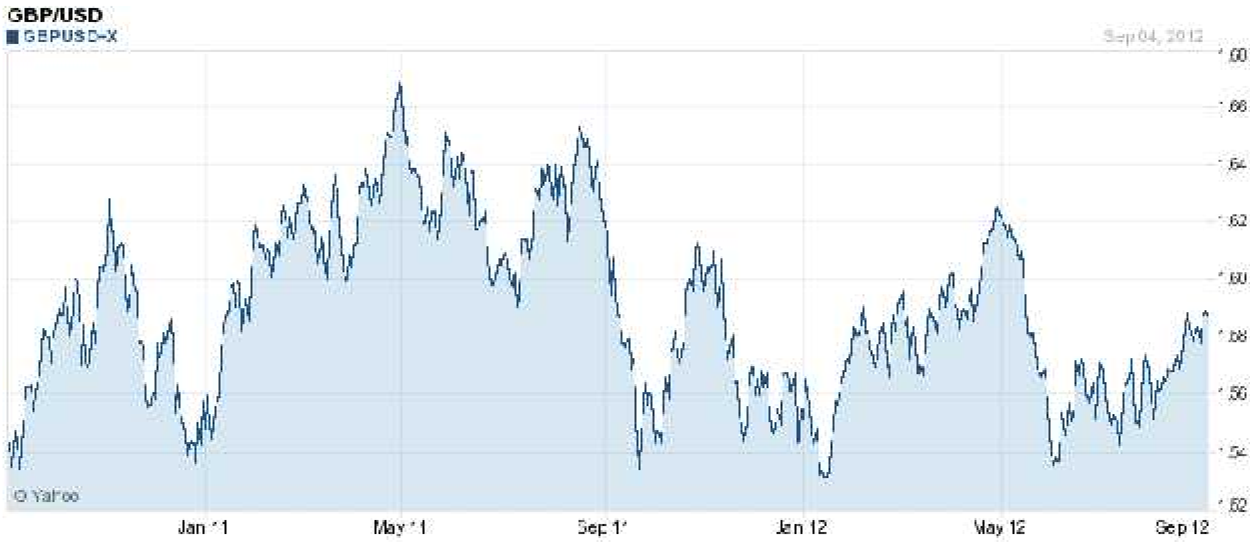
Japanese Yen:



European Euro:

C11-3 (continued)

British Pound:



Mexican Peso:

C11-4 Accounting for Foreign Currency-Denominated Accounts Payable

MEMO

TO: Marie Lamont, Manager, Mardi Gras audit

From: ______________ _______________, CPA

Re: Mardi Gras Corporation's Foreign Currency Transactions

Our client, Mardi Gras Corporation, needs to change its method of accounting for the effects of changes in the exchange rate for Swiss francs. Currently, any difference between the liability recorded when the merchandise is received and the amount that is paid (in U.S. dollars) when the liability is settled is recorded by our client as an adjustment to the cost of the inventory purchased. However, this difference is the result of changes in the exchange rate for Swiss francs between the date of the inventory purchase and the payment date and is not the result of changes in the price of the merchandise.

Mardi Gras's purchases from the Swiss company are foreign currency transactions that result in Mardi Gras recording a payable denominated in Swiss francs. The liability is fixed in terms of the amount of Swiss francs that must be paid.

Mardi Gras is recording the payable appropriately since they are using the exchange rate on the date of the inventory purchase to convert the francs to dollars. This is consistent with requirements in **ASC 830**. However, the accounting for subsequent changes in the U.S. dollar equivalent of the Swiss franc liability is not acceptable. Rather than an adjustment to the cost of inventory, changes in the liability that result because of changes in the exchange rate between the U.S. dollar and the Swiss franc must be recognized as a foreign currency transaction gain or loss and must be included in net income in the period in which the rate change occurs.

Mardi Gras should also be aware that any outstanding foreign currency payables at the balance sheet date should be adjusted to their U.S. dollar equivalent using the exchange rate in effect on the balance sheet date, with any resulting foreign currency transaction gains or losses included in earnings of the current period.

Disclosure of the aggregate gain or loss from foreign currency transactions used in determining net income for a given period is also required.

Authoritative support for this memo can be found in the following references:

ASC 830-20-30, ASC 830-20-35, ASC 830-20-50

C11-5 Accounting for Foreign Currency Forward Contracts

MEMO

To: Lindsay Williams, Treasurer

From: __________ ___________, CPA, Assistant Treasurer

Re: Financial Statement Effects of Foreign Currency Forward Contract

Avanti has entered into a contract to purchase equipment for a fixed price of 4.5 million euros. This agreement meets the definition of an unrecognized firm commitment that has both contractual rights and contractual obligations. The fixed price of the firm commitment exposes the company to the fair value risk of changes in the price of the equipment. However, because the purchase price is denominated in euros, the contract also exposes the company to the risk of changes in the value of the foreign currency. The company may enter into a derivative contract. **ASC 815-20-25** allows such a derivative contract of a foreign currency exposure of an unrecognized firm commitment to be designated as a hedge.

If Avanti elects to use a forward exchange contract to fix the exchange rate to purchase euros, the company can designate the forward contract as a foreign currency fair value hedge of the foreign currency exposure in the firm commitment if there is formal documentation of the hedging relationship and the rationale for the management's decision to use the hedge, and if the effectiveness of the hedge is assessed before every reporting date and at least every three months.

If the forward contract qualifies as a foreign currency fair value hedge, the gain or loss on the hedge and the offsetting gain or loss on the hedged firm commitment should be recognized in earnings in the same accounting period.

Therefore, during the commitment period, there will be no effect on the income statement; the gain or loss on the derivative will be offset by the loss or gain on the firm commitment.

After the equipment is delivered, a foreign currency denominated payable will be recorded and accounted for under **ASC 830-20-30**. Transaction gains or losses on the foreign currency liability may continue to be offset by changes in the fair value of the forward contract.

Authoritative support for this memo can be found in the following references:

ASC 815-20-25-23 through ASC 815-20-25-33, ASC 830-20-30

C11-6 Accounting for Hedges of Available-for-Sale Securities

MEMO

To: Mark Becker, CFO

From: ___________ _______________, CPA, Investment Division

Re: Hedge Accounting—Bond Portfolio

The proposal has been made to use an interest rate futures contract to hedge the interest rate risk associated with Rainy Day's portfolio of bond investments. Although the use of the derivative may be expected to offset the changes in the value of the bond portfolio, the issue that must be considered is whether the use of this derivative would qualify for hedge accounting under **ASC 815-20-25**. If hedge accounting cannot be used, the changes in the fair value of the futures contract will be included in net income. However, the changes in the fair value of the bond portfolio will continue to be reported as other comprehensive income, but not in net income.

ASC 815-20-25 does allow a portfolio of similar assets or similar liabilities to be designated as the hedged item under certain conditions. The change in value of any item in the portfolio must be generally proportionate to changes in value for the entire portfolio. To meet this condition, Rainy Day should be able to demonstrate that the values of the individual bonds within the portfolio respond to interest rate changes in a proportionate manner to the overall portfolio response. Given the wide range of maturity dates on the bonds in the portfolio, this condition may be difficult to meet.

If the aggregation criteria are not met, Rainy Day could consider aggregating bonds of similar maturities into several sub-portfolios and using multiple derivatives to hedge the interest rate risk associated with each group of bond investments. This subdividing of the bond portfolio would also make it easier to demonstrate if the hedge is effective.

If hedge accounting is allowed, the effect on earnings of the derivative will be offset by the changes in the fair value of the bond investment.

Authoritative support for this memo can be found in the following references:

ASC 815-20-25

SOLUTIONS TO EXERCISES

E11-1 Exchange Rates

a. Indirect exchange rates for pounds and dollars:
$1.00 = .625 British pounds (1 pound / $1.60)
$1.00 = 1.3514 Canadian dollars (1 Canadian dollar / $0.74)

b. $$\text{FCU} = \frac{\$}{\text{Direct Exchange Rate}} = \frac{\$8{,}000}{\$1.60} = 5{,}000 \text{ British pounds}$$

c. 4,000 Canadian dollars x $0.74 = $2,960

E11-2 Changes in Exchange Rates

a. Exchange rates:

	Arrival Date	Departure Date
Direct Exchange Rate	1 florin = $0.20 ($200 / 1,000 florins)	1 florin = $0.15 ($15 / 100 florins)
Indirect Exchange Rate	$1.00 = 5 florins (1,000 florins / $200)	$1.00 = 6.67 florins (100 florins / $15)

b. The direct exchange rate has decreased. This means that the dollar has strengthened during Mr. Alt's visit. For example, upon arrival, Mr. Alt had to pay $0.20 per each florin. Upon departure, however, each florin is worth just $0.15. This means that the relative value of the dollar has increased or, alternatively, the value of the florin has decreased.

c. The U.S. dollar equivalent values for the 100 florins are:

Arrival date	
100 florins x $0.20 =	$20
Departure date	
100 florins x $0.15 =	15
Foreign Currency Transaction Loss	$ 5

Mr. Alt held florins for a time in which the florin was weakening against the dollar. Thus, Mr. Alt experienced a loss by holding the weaker currency.

E11-3 Basic Understanding of Foreign Exposure

a. If the direct exchange rate increases, the U.S. dollar weakens relative to the foreign currency unit. If the indirect exchange rate increases, the U.S. dollar strengthens relative to the foreign currency unit.

b.

	Settlement	Direct Exchange Rate		Indirect Exchange Rate	
Transaction	Currency	Increases	Decreases	Increases	Decreases
Importing	Dollar	NA	NA	NA	NA
Importing	LCU	L	G	G	L
Exporting	Dollar	NA	NA	NA	NA
Exporting	LCU	G	L	L	G

E11-4 Account Balances

Foreign Currency Units (€)

From receivable: (€250,000 x $0.58)	(7) 2/1/x7	145,000	To payable: (€125,000 x $0.58)	(8) 2/1/x7	72,500
	Bal. 2/2/x7	72,500			

Accounts Receivable (€)

(€250,000 x$0.60)	(1) 11/1/x6	150,000			
[€250,000 x ($0.62 - $0.60)]	(3) 12/31/x6 AJE	5,000			
(€250,000 x $0.62)	Bal. 12/31/x6	155,000	[€250,000 x ($0.58 - $0.62)]	(5) 2/1/x7 AJE	10,000
(€250,000 x $0.58)	Bal. 2/1/x7	145,000	(€250,000 x $0.58)	(7) 2/1/x7 Settle	145,000
	Bal. 2/2/x7	-0-			

Accounts Payable (€)

			(€125,000 x $0.60)	(2) 11/1/x6	75,000
			[€125,000 x ($0.62 - $0.60)]	(4) 12/31/x6 AJE	2,500
			(€125,000 x $0.62)	Bal. 12/31/x6	77,500
[€125,000 x ($0.58 - $0.62)]	(6) 2/1/x7 AJE	5,000			
(€125,000 x $0.58)	(8) 2/1/x7 Settle	72,500	(€125,000 x $0.58)	Bal. 2/1/x7	72,500
				Bal. 2/2/x7	-0-

Foreign Currency Transaction Loss

[€125,000 x ($0.62 - $0.60)]	(4) 12/31/x6 AJE	2,500			
[€250,000 x ($0.58 - $0.62)]	(5) 2/1/x7 AJE	10,000			

Foreign Currency Transaction Gain

			[€250,000 x ($0.62 - $0.60)]	(3) 12/31/x6 AJE	5,000
			[€125,000 x ($0.58 - $0.62)]	(6) 2/1/x7 AJE	5,000

E11-5 Determining Year-End Account Balances for Import and Export Transactions

	Accounts Receivable	Accounts Payable	Foreign Currency Transaction Exchange Loss	Foreign Currency Transaction Exchange Gain
Case 1	NA	$16,000(a)	NA	$2,000(b)
Case 2	$38,000(c)	NA	NA	$2,000(d)
Case 3	NA	$27,000(e)	$3,000(f)	NA
Case 4	$6,250(g)	NA	$1,250(h)	NA

(a) LCU 40,000 x $0.40
(b) LCU 40,000 x ($0.40 - $0.45)
(c) LCU 20,000 x $1.90
(d) LCU 20,000 x ($1.90 - $1.80)
(e) LCU 30,000 x $0.90
(f) LCU 30,000 x ($0.90 - $0.80)
(g) LCU 2,500,000 x $0.0025
(h) LCU 2,500,000 x ($0.0025 - $0.003)

E11-6 Transactions with Foreign Companies

a. May 1

Inventory (or Purchases)	8,400	
Accounts Payable		8,400

Foreign purchase denominated in U.S. dollars.

June 20

Accounts Payable	8,400	
Cash		8,400

Settle payable.

July 1

Accounts Receivable	10,000	
Sales		10,000

Foreign sale denominated in U.S. dollars.

August 10

Cash	10,000	
Accounts Receivable		10,000

Collect receivable.

b. May 1

Inventory (or Purchases)	8,400	
Accounts Payable (¥)		8,400

Foreign purchase denominated in yen: $8,400 / $0.0070 = ¥1,200,000

June 20

Foreign Currency Transaction Loss	600	
Accounts Payable (¥)		600

Revalue foreign currency payable to U.S. dollar equivalent value:
$9,000 = ¥1,200,000 x $0.0075 June 20 spot rate
- 8,400 = ¥1,200,000 x $0.0070 May 1 spot rate
$ 600 = ¥1,200,000 x ($0.0075 - $0.0070)

Accounts Payable (¥)	9,000	
Foreign Currency Units (¥)		9,000

Settle payable denominated in yen.

July 1

Accounts Receivable (BRL)	10,000	
Sales		10,000

Foreign sale denominated in Brazilian reals:
$10,000 / $0.20 = BRL50,000

August 10

Accounts Receivable (BRL)	1,000	
Foreign Currency Transaction Gain		1,000

Revalue foreign currency receivable to U.S. dollar equivalent value:
$ 11,000 = BRL50,000 x $0.22 Aug. 10 spot rate
- 10,000 = BRL50,000 x $0.20 July 1 spot rate
$ 1,000 = BRL50,000 x ($0.22 - $0.20)

Foreign Currency Units (BRL)	11,000	
Accounts Receivable (BRL)		11,000

Receive Brazilian reals in settlement of receivable.

E11-7 Foreign Purchase Transaction

a. Denominated in Swiss francs
Rone Imports reports in U.S. dollars

	12/1/X1	12/31/X1	1/15/X2
	Transaction Date	Balance Sheet Date	Settlement Date
Direct Exchange Rate	$0.70	$0.66	$0.68

b. December 1, 20X1

Inventory (or Purchases)	10,500	
Accounts Payable (SFr)		10,500

$10,500 = SFr 15,000 x $0.70

December 31, 20X1

Accounts Payable (SFr)	600	
Foreign Currency Transaction Gain		600

Revalue foreign currency payable to
equivalent U.S. dollar value:
$ 9,900 = SFr 15,000 x $0.66 Dec. 31 spot rate
-10,500 = SFr 15,000 x $0.70 Dec. 1 spot rate
$ 600 = SFr 15,000 x ($0.66 - $0.70)

January 15, 20X2

Foreign Currency Transaction Loss	300	
Accounts Payable (SFr)		300

Revalue payable to current U.S. dollar equivalent:
$10,200 = SFr 15,000 x $0.68 Jan. 15, 20X2, value
- 9,900 = SFr 15,000 x $0.66 Dec. 31, 20X1, value
$ 300 = SFr 15,000 x ($0.68 - $0.66)

Accounts Payable (SFr)	10,200	
Foreign Currency Units (SFr)		10,200

$10,200 = SFr 15,000 x $0.68

Accounts Payable (SFr)

AJE 12/31/X1	600	(SFr 15,000 x $0.70)	12/1/X1	10,500
		(SFr 15,000 x $0.66)	Bal 12/31/X1	9,900
			AJE 1/15/X2	300
1/15/X2 Settlement	10,200	(SFr 15,000 x $0.68)	Bal 1/15/ X2	10,200
			Bal 1/16/X2	-0-

E11-8 Adjusting Entries for Foreign Currency Balances

a. December 31, 20X6

Accounts Receivable (E£)	10,000	
Foreign Currency Transaction Gain		10,000

Adjust receivable denominated in Egyptian pounds to current U.S. dollar equivalent and recognize exchange gain:
$83,600 = E£475,000 x $0.176 Dec. 31 spot rate
- 73,600 = Preadjusted Dec. 31, 20X6, value
$10,000

Accounts Payable (¥)	5,200	
Foreign Currency Transaction Gain		5,200

Adjust payable denominated in foreign currency to current U.S. dollar equivalent and recognize exchange gain:
$175,300 = Preadjusted Dec. 31, 20X6, value
- 170,100 = ¥21,000,000 x $0.0081, Dec. 31 spot rate
$ 5,200

b.

Accounts Receivable (E£)	1,900	
Foreign Currency Transaction Gain		1,900

Adjust receivable denominated in Egyptian Pounds to equivalent U.S. dollar value on settlement date:
$85,500 = E£475,000 x $0.180 20X7 collection date value
- 83,600 = E£475,000 x $0.176 Dec. 31, 20X6, spot rate
$ 1,900 = E£475,000 x ($0.180 - $0.176)

Cash	164,000	
Foreign Currency Units (E£)	85,500	
Accounts Receivable (E£)		85,500
Accounts Receivable ($)		164,000

Collect all accounts receivable.

c.

Accounts Payable (¥)	6,300	
Foreign Currency Transaction Gain		6,300

Adjust payable to equivalent U.S. dollar value on settlement date:
$163,800 = ¥21,000,000 x $0.0078 20X7 payment date value
- 170,100 = ¥21,000,000 x $0.0081 Dec. 31, 20X6, spot rate
$ 6,300 = ¥21,000,000 x ($0.0078 - $0.0081)

Accounts Payable ($)	86,000	
Accounts Payable (¥)	163,800	
Foreign Currency Units (¥)		163,800
Cash		86,000

Payment of all accounts payable.

E11-8 (continued)

d. Transaction gain on E£:

December 31, 20X6	$10,000	gain
December 31, 20X7	1,900	gain
Overall	$11,900	gain

e. Transaction gain on ¥:

December 31, 20X6	$ 5,200	gain
December 31, 20X7	6,300	gain
Overall	$11,500	gain

f. Overall foreign currency transactions gain:

Gain on E£ transaction	$11,900
Gain on ¥ transaction	11,500
	$23,400

Chocolate De-Lites could have hedged its exposed position. The exposed positions are only those denominated in foreign currency units. The accounts receivable denominated in E£ could be hedged by selling E£ in the forward market, thereby locking in the value of the E£. The accounts payable denominated in ¥ could be hedged by buying ¥ in the forward market, thereby locking in the value of the ¥.

E11-9 Purchase with Forward Exchange Contract

3/10 | 6/8

Transaction Date
- Account payable in C$
- Sign 90-day FEC to receive C$

Settlement Date
- Receive C$ from FEC completion
- Settle payable in C$

March 10

Inventory (or Purchases)	17,100	
Accounts Payable (C$)		17,100

Foreign purchase of engines: $17,100 = C$30,000 x $0.57

Foreign Currency Receivable from Exchange Broker (C$)	17,400	
Dollars Payable to Exchange Broker ($)		17,400

Signed 90-day forward exchange contract to receive C$:
$17,400 = C$30,000 x $0.58 forward rate

June 8

Foreign Currency Receivable from Broker (C$)	600	
Foreign Currency Transaction Gain		600

Revalue foreign currency receivable to current equivalent U.S. dollar value:
$18,000 = C$30,000 x $0.60 June 8 spot rate
- 17,400 = C$30,000 x $0.58 Mar. 10 forward rate
$ 600 = C$30,000 x ($0.60 - $0.58)

Foreign Currency Transaction Loss	900	
Accounts Payable (C$)		900

Revalue foreign currency accounts payable to current U.S. dollar value:
$900 = C$30,000 x ($0.60 - $0.57)

Dollars Payable to Exchange Broker ($)	17,400	
Cash		17,400

Pay U.S. dollars to exchange broker for forward contract.

Foreign Currency Units (C$)	18,000	
Foreign Currency Receivable from Exchange Broker (C$)		18,000

Receive Canadian dollars from exchange broker:
$18,000 = C$30,000 x $0.60 spot rate

Accounts Payable (C$)	18,000	
Foreign Currency Units (C$)		18,000

Settle foreign currency payable.

E11-10 Purchase with Forward Exchange Contract and Intervening Fiscal Year-End

12/16	12/31	2/14
Transaction Date — Payable in SFr — Sign FEC to receive SFr	Balance Sheet date	Settlement Date — Receive SFr from FEC — Settle payable in SFr
Forward rate: SFr 1 = $0.67	SFr 1 = $0.695	
Spot rate: SFr 1 = $0.68	SFr 1 = $0.70	SFr 1 = $0.69

PART I: Forward contract not a designated hedge.

a. December 16, 20X7

Equipment	95,200	
Accounts Payable (SFr)		95,200

Purchased equipment with payable denominated in SFr:
$95,200 = SFr 140,000 x $0.68 spot rate

Foreign Currency Receivable from Broker (SFr)	93,800	
Dollars Payable to Exchange Broker ($)		93,800

Signed 60-day forward exchange contract:
$93,800 = SFr 140,000 x $0.67 forward rate

December 31, 20X7

Foreign Currency Transaction Loss	2,800	
Accounts Payable (SFr)		2,800

Revalue accounts payable to current U.S. dollar equivalent:
$98,000 = SFr 140,000 x $0.70 Dec. 31 spot rate
- 95,200 = SFr 140,000 x $0.68 Dec. 16 spot rate
$ 2,800 = SFr 140,000 x ($0.70 - $0.68)

Foreign Currency Receivable from Exchange Broker (SFr)	3,500	
Foreign Currency Transaction Gain		3,500

Revalue foreign currency receivable:
$97,300 = SFr 140,000 x $0.695 Dec. 31 forward rate
- 93,800 = SFr 140,000 x $0.67 Dec. 16 forward rate
$ 3,500 = SFr 140,000 x ($0.695 - $0.67)

E11-10 (continued)

February 14, 20X8

Foreign Currency Transaction Loss	700	
Foreign Currency Receivable from Exchange Broker (SFr)		700

Revalue foreign currency receivable to current equivalent U.S. dollar value:
$96,600 = SFr 140,000 x $0.69 Feb. 14, 20X8, spot rate
- 97,300 = SFr 140,000 x $0.695 Dec. 31, 20X7, forward rate
$ 700 = SFr 140,000 x ($0.69 - $0.695)

Accounts Payable (SFr)	1,400	
Foreign Currency Transaction Gain		1,400

Revalue foreign currency accounts payable to current U.S. dollar value:
$96,600 = SFr 140,000 x $0.69 Feb. 14, 20X8, spot rate
- 98,000 = SFr 140,000 x $0.70 Dec. 31, 20X7, spot rate
$ 1,400 = SFr 140,000 x ($0.69 - $0.70)

Dollars Payable to Exchange Broker ($)	93,800	
Cash		93,800

Pay U.S. dollars to exchange broker for forward contract.

Foreign Currency Units (SFr)	96,600	
Foreign Currency Receivable from Exchange Broker (SFr)		96,600

Receive francs from exchange broker:
$96,600 = SFr 140,000 x $0.69 spot rate

Accounts Payable (SFr)	96,600	
Foreign Currency Units (SFr)		96,600

Settle foreign currency payable.

b.

Foreign Currency Exchange Loss (with Swiss Co.)	$(2,800)
Foreign Currency Exchange Gain (with Broker)	3,500
Net effect on income	$ 700

c. Overall effect of transactions:

20X7 Net Foreign Currency Gain	$ 700
20X8 Foreign Currency Loss on receivable	(700)
20X8 Foreign Currency Transaction Gain on payable	1,400
Overall effect	$ 1,400

E11-10 (continued)

PART II: Forward contract designated as a cash flow hedge.

December 16, 20X7

Equipment	95,200	
Accounts Payable (SFr)		95,200

Purchased equipment with payable denominated in SFr:
$95,200 = SFr 140,000 x $0.68 spot rate

Foreign Currency Receivable from Broker (SFr)	93,800	
Dollars Payable to Exchange Broker ($)		93,800

Signed 60-day forward exchange contract:
$93,800 = SFr 140,000 x $0.67 forward rate

December 31, 20X7

Foreign Currency Transaction Loss	2,800	
Accounts Payable (SFr)		2,800

Revalue accounts payable to current U.S. dollar equivalent:
$98,000 = SFr 140,000 x $0.70 Dec. 31 spot rate
- 95,200 = SFr 140,000 x $0.68 Dec. 16 spot rate
$ 2,800 = SFr 140,000 x ($0.70 - $0.68)

Foreign Currency Receivable from Exchange Broker (SFr)	3,500	
Other Comprehensive Income		3,500

Revalue foreign currency receivable with effective portion of change in fair value of cash flow hedging derivative recorded in other comprehensive income:
$97,300 = SFr 140,000 x $0.695 Dec. 31 forward rate
- 93,800 = SFr 140,000 x $0.67 Dec. 16 forward rate
$ 3,500 = SFr 140,000 x ($0.695 - $0.67)

Other Comprehensive Income	2,800	
Foreign Currency Transaction Gain		2,800

In accordance with **ASC 815**, an amount is reclassified from other comprehensive income to fully offset the foreign currency transaction loss on the revaluation of the foreign currency denominated account payable.

February 14, 20X8

Other Comprehensive Income	700	
Foreign Currency Receivable from Exchange Broker (SFr)		700

Revalue foreign currency receivable to current equivalent U.S. dollar value and record effective portion of change into other comprehensive income in accordance with **ASC 815.** Forward contract has now expired.
$96,600 = SFr 140,000 x $0.69 Feb. 14, 20X8, spot rate
- 97,300 = SFr 140,000 x $0.695 Dec. 31, 20X7, forward rate
$ 700 = SFr 140,000 x ($0.69 - $0.695)

E11-10 (continued)

Accounts Payable (SFr)	1,400	
Foreign Currency Transaction Gain		1,400

Revalue foreign currency accounts payable to current U.S. dollar value using the spot rate in accordance with **ASC 830**:
$96,600 = SFr 140,000 x $0.69 Feb. 14, 20X8, spot rate
- 98,000 = SFr 140,000 x $0.70 Dec. 31, 20X7, spot rate
$ 1,400 = SFr 140,000 x ($0.69 - $0.70)

Foreign Currency Transaction Loss	1,400	
Other Comprehensive Income		1,400

In accordance with **ASC 815**, an amount is reclassified from other comprehensive income to fully offset the foreign currency transaction gain on the revaluation of the foreign currency denominated account payable.

Dollars Payable to Exchange Broker ($)	93,800	
Cash		93,800

Pay U.S. dollars to exchange broker for forward contract.

Foreign Currency Units (SFr)	96,600	
Foreign Currency Receivable from Exchange Broker (SFr)		96,600

Receive francs from exchange broker:
$96,600 = SFr 140,000 x $0.69 spot rate

Accounts Payable (SFr)	96,600	
Foreign Currency Units (SFr)		96,600

Settle foreign currency payable.

Note that there is a remaining credit balance of $1,400 in Other Comprehensive Income. This represents the initial discount on the forward contract and will be reclassified into earnings in alignment with the depreciation on the equipment that was acquired.

E11-11 Foreign Currency Transactions [AICPA Adapted]

1. **d**

			20X1				20X2
$0.4895	x	€30,000	$14,685	$0.4845	x	€30,000	$14,535
$0.4845	x	€30,000	14,535	$0.4945	x	€30,000	14,835
		Gain	$ 150			Loss	$ (300)

2. **b** January 15

Foreign Currency Units (LCU)	300,000	
Exchange Loss	15,000	
Accounts Receivable (LCU)		315,000

Collect foreign currency receivable and recognize foreign currency transaction loss for changes in exchange rates:
$300,000 = (LCU 900,000 / LCU 3) Jan. 15 value
- 315,000 = Dec. 31 U.S. dollar equivalent
$ 15,000 Foreign currency transaction loss

3. **d**

$120,000	=	July 1, 20X1, U.S. dollar equivalent value
$140,000	=	December 31, 20X1, U.S. dollar equivalent value (LCU 840,000 / $140,000) = LCU 6 / $1
-105,000	=	July 1, 20X2, U.S. dollar equivalent value (LCU 840,000 / 8) = $105,000
$(35,000)		Foreign currency transaction loss

4. **c** C$1 / $0.90 (C$1.11 = $1.00)

5. **d**

$280,000	=	July 1, 20X5, U.S. dollar equivalent value
-240,000	=	December 31, 20X4, U.S. dollar equivalent value
$ 40,000		Foreign currency transaction loss

6. **d** Regardless of whether it is a gain or a loss, the effect of the change will always be included as a component of income.

   (a) *Incorrect*. When the exchange rate in the transaction changes, the effect flows through the income, not in stockholders' equity.
   (b) *Incorrect.* When the exchange rate in the transaction changes, the effect flows through the income, not in stockholders' equity.
   (c) *Incorrect.* The effect is recorded as a component of income for both gains and losses.

7. **d** The resulting loss is required to be included as a component of income, and will be recorded for the year in which it occurred.

   (a) *Incorrect*. The loss must be included in 20X6.
   (b) *Incorrect.* It must be recorded as a component of income during 20X6.

(c) *Incorrect.* A deferred charge would not result. Instead, the loss is recorded during 20X6 as a component of income.

E11-12 Sale in Foreign Currency

a.

	October 1	December 1	April 1
	Transaction Date	Balance Sheet Date	Settlement Date
Direct exchange rates P 1 =	$0.0068	$0.0078	$0.0076

Dollar Weakened (rate increased) — Dollar Strengthened (rate decreased)

b. October 1, 20X6

Accounts Receivable (P)	34,000	
Sales Revenue		34,000

Sold equipment with receivable denominated in pesetas(P):
$34,000 = P 5,000,000 x $0.0068

December 31, 20X6

Accounts Receivable (P)	5,000	
Foreign Currency Transaction Gain		5,000

Revalue foreign currency receivable to current U.S. dollar equivalent:
$39,000 = P 5,000,000 x $0.0078 Dec. 31 spot rate
- 34,000 = P 5,000,000 x $0.0068 Oct. 1 spot rate
$ 5,000 = P 5,000,000 x ($0.0078 - $0.0068)

April 1, 20X7

Foreign Currency Transaction Loss	1,000	
Accounts Receivable (P)		1,000

Revalue foreign receivable to current U.S. dollar equivalent:
$38,000 = P 5,000,000 x $0.0076 April 1 spot rate
- 39,000 = P 5,000,000 x $0.0078 Dec. 31 spot rate
$ 1,000 = P 5,000,000 x ($0.0076 - $0.0078)

Foreign Currency Units (P)	38,000	
Accounts Receivable (P)		38,000

Collect foreign receivable:
$38,000 = P 5,000,000 x $0.0076

c. Net foreign currency transaction gain = $4,000

October 1 to December 31	=	$5,000	gain
January 1 to April 1	=	(1,000)	loss
		$4,000	gain

Proof: $4,000 = P 5,000,000 x ($0.0076 - $0.0068)

E11-13 Sale with Forward Exchange Contract

April 20 — June 19

Transaction Date
— Receivable in kronor
— Sign FEC to deliver kronor

Settlement Date
— Receive kronor from receivable
— Complete FEC with delivery of kronor

Forward rate: SKr 1 = $0.167
Spot rate: SKr 1 = $0.170 SKr 1 = $0.165

a. April 20

Accounts Receivable (SKr)	34,000	
Sales Revenue		34,000

$34,000 = SKr 200,000 x $0.17 spot rate

Dollars Receivable from Exchange Broker	33,400	
Foreign Currency Payable to Exchange Broker (SKr)		33,400

Sign 60-day forward exchange contract to deliver kronor:
$33,400 = SKr 200,000 x $0.167 forward rate

June 19

Foreign Currency Transaction Loss	1,000	
Accounts Receivable (SKr)		1,000

Revalue foreign currency receivable to current equivalent U.S. dollar value:
$33,000 = SKr 200,000 x $0.165 June 19 spot rate
- 34,000 = SKr 200,000 x $0.170 April 20 spot rate
$ 1,000 = SKr 200,000 x ($0.165 - $0.170)

Foreign Currency Payable to Exchange Broker (SKr)	400	
Foreign Currency Transaction Gain		400

Revalue foreign currency payable to current U.S. dollar value:
$33,000 = SKr 200,000 x $0.165 June 19 spot rate
- 33,400 = SKr 200,000 x $0.167 April 20 forward rate
$ 400 = SKr 200,000 x $0.002

Foreign Currency Units (SKr)	33,000	
Accounts Receivable (SKr)		33,000

Receive kronor from foreign receivable:
$33,000 = SKr 200,000 x $0.165 spot rate

Foreign Currency Payable to Exchange Broker (SKr)	33,000	
Foreign Currency Units (SKr)		33,000

Pay foreign currency units to exchange broker for forward payable contract.

Cash	33,400	
Dollars Receivable from Exchange Broker ($)		33,400

Receive U.S. dollars in accordance with rate established in forward exchange contract.

E11-13 (continued)

b. Effects on net income:

Use of forward contract:	
1) Dollar strengthened from April 20 to June 19	
Exchange loss of $1,000 on foreign currency receivable	
Exchange gain of $400 for foreign currency payable to exchange broker; therefore, net effect loss	$(600)
If Alman had not acquired the forward contract:	
1) Dollar strengthened resulting in exchange loss of $1,000 on foreign currency receivable from customer	(1,000)
Difference	$ (400)

Hedging with the forward exchange contract resulted in $400 less charged to net income; thus, net income was higher as a result of acquiring the forward contract.

E11-14 Foreign Currency Transactions [AICPA Adapted]

1. c $4,000

Accounts Payable (€)

		(200,000 x $0.4875)	12/10/X3	97,500
AJE	4,000			
		(200,000 x $0.4675)	12/31/X3	93,500

Accounts Payable (€)	4,000	
Foreign Exchange Gain		4,000

2. d $27,000 = $6,000 + $20,000 + $1,000

Accounts Payable (FCU)

	1/20/X2	90,000
	AJE	6,000
	3/20/X2	96,000

Foreign Exchange Loss	6,000	
Accounts Payable (FCU)		6,000

E11-14 (continued)

Notes Payable (FCU)

		7/01/X2	500,000
		AJE	20,000
		12/31/X2	520,000

Foreign Exchange Loss	20,000	
Notes Payable (FCU)		20,000

Interest Payable (FCU)

		($500,000 x .10 x 1/2 year)	25,000
		AJE	1,000
		12/31X2	26,000

Foreign Exchange Loss	1,000	
Interest Payable (FCU)		1,000

3. c $5,000

Accounts Receivable (FCU)

10/15/X1	100,000			
AJE	5,000			
11/16/X1	105,000	Settlement	11/16/X1	105,000

Accounts Receivable (FCU)	5,000	
Foreign Exchange Gain		5,000

Note: The receivable is recorded on October 15, 20X1, when the goods were shipped, not on September 1, 20X1, when the order was received.

4. b $1,000

Accounts Payable (FCU)

X3 AJE	500	(10,000 x $0.60)	4/08/X3	6,000
X4 AJE	1,000	(10,000 x $0.55)	12/31/X3	5,500
Settlement	4,500	(10,000 x $0.45)	3/01/X4	4,500
			Bal.	-0-

X4 AJE	Accounts Payable (FCU)	1,000	
	Foreign Exchange Gain		1,000

E11-14 (continued)

5. b A gain should be reported because the peso weakened from December 15 (the transaction date) to the balance sheet date (December 31, 20X5). Stevens would not record the purchase until title transferred on December 15, 20X5. The accounts payable recorded on December 15 are denominated in pesos when the indirect exchange rate was $1 = 20 pesos. On December 31, 20X5, the indirect exchange rate was $1 = 21 pesos, meaning that the dollar strengthened and the peso weakened. Therefore, a foreign currency transaction gain would be reported for 20X5. This gain would be included in net income before extraordinary items.

6. b Foreign currency transaction gains and losses are reported on the income statements of U.S. companies when receivables and payables are denominated in foreign currencies. Since Louis did not report any foreign exchange gains or losses, the payable to the German company was denominated in U.S. dollars, not European euros.

7. b $9,000 = 300,000 pounds x ($1.65 - $1.62). The foreign currency transaction gain is computed using spot rates on the transaction date (November 30, 20X5) and the balance sheet date (December 31, 20X5). The forward exchange rates are not used because the transaction was not hedged.

E11-15 Sale with Forward Contract and Fiscal Year-End

May 14	June 30	July 13
Transaction Date	Balance Sheet Date	Settlement Date
— Sale with receivable denominated in guilders — Enter into 60-day FEC to deliver guilders		— Collect receivable in guilders — Complete FEC with delivery of guilders

Forward rate:

G 1 = $0.541	G 1 = $0.530	

Spot rate:

G 1 = $0.530	G 1 = $0.534	G 1 = $0.525

a.

1. May 14

Accounts Receivable (G)	26,500	
Sales Revenue		26,500

Foreign currency sale: $26,500 = G 50,000 x $0.530

2. May 14

Dollars Receivable from Exchange Broker	27,050	
Foreign Currency Payable to Exchange Broker (G)		27,050

Signed 60-day forward contract to deliver guilders:
$27,050 = G 50,000 x $0.541 forward rate

3. June 30

Accounts Receivable (G)	200	
Foreign Currency Transaction Gain		200

Revalue foreign currency receivable to end-of-period U.S. dollar equivalent using spot rate according to **ASC 830**:

$26,700 = G 50,000 x $0.534 June 30 spot rate
- 26,500 = G 50,000 x $0.530 May 14 spot rate
$ 200 = G 50,000 x ($0.534 - $0.530)

Foreign Currency Payable to Exchange Broker (G)	550	
Foreign Currency Transaction Gain		550

Revalue foreign currency payable to year-end fair value using forward rate according to **ASC 815**:

$26,500 = G 50,000 x $0.530 June 30 forward rate
- 27,050 = G 50,000 x $0.541 May 14 forward rate
$ 550 = G 50,000 x $0.011

E11-15 (continued)

4. July 13

Foreign Currency Transaction Loss	450	
Accounts Receivable (G)		450

Revalue foreign currency receivable to U.S. dollar equivalent on settlement date:
$26,250 = G 50,000 x $0.525 July 13 spot rate
- 26,700 = G 50,000 x $0.534 June 30 spot rate
$ 450 = G 50,000 x ($0.525 - $0.534)

Foreign Currency Units (G)	26,250	
Accounts Receivable (G)		26,250

Collect foreign currency receivable.

5. July 13

Foreign Currency Payable to Exchange Broker (G)	250	
Foreign Currency Transaction Gain		250

Revalue foreign currency payable to fair value at settlement date using spot rate because the term of the contract has expired:
$26,250 = G 50,000 x $0.525 July 13 spot rate
- 26,500 = G 50,000 x $0.530 June 30 forward rate
$ 250 = G 50,000 x $0.005

Foreign Currency Payable to Exchange Broker (G)	26,250	
Foreign Currency Units (G)		26,250

Pay guilders to exchange broker.

Cash	27,050	
Dollars Receivable from Exchange Broker		27,050

Receive dollars from exchange broker for guilders delivered:
$27,050 = G 50,000 x $0.541 rate established in forward contract signed on May 14.

b. June 30

FCT gain on account from Netherlands Company	$200
FCT gain on account to Broker	550
Net increase in net income for FYE June 30	$750

c. July 13

FCT loss on account receivable from Netherlands Company	$(450)
FCT gain on account to Broker	250
Net decrease in net income for the period from 7-1 to 7-13	$(200)
Net increase in net income for the FYE 6-30	750
Overall gain on transaction	$ 550

d.

May 14 — June 30 gain	$ 200
July 1 — July 13 loss	(450)
Overall loss if forward contract not used	$(250)

E11-16A Hedge of a Purchase (Commitment without and with Time Value of Money Consideration)

	11/1/X6	12/31/X6	1/30/X7	3/1/X7
	— Commitment to deliver pounds in 120 days — Sign FEC to hedge foreign currency commitment	Balance Sheet Date	Transaction Date — Receipt of goods and recognition of foreign currency payable	Settlement Date — Receive British pounds from settlement of FEC — Pay pounds to settle foreign currency accounts payable
Forward rate:	£1 = $1.59	£1 = $1.62	£1 = $1.60	
Spot rate:	£1 = $1.61	£1 = $1.65	£1 = $1.59	£1 = $1.585

a. No net exposure between November 1 and March 1. Smith Imports, Inc., has hedged its foreign currency purchase commitment with a forward contract to receive an equal number of foreign currency units. Note that the notional amount of the forward exchange contract, the unrecognized firm commitment, and the eventual foreign currency-denominated account payable are each for £30,000. The impact on earnings from the forward contract will be a total of $600, which is the amount of the discount on the forward contract ((£30,000 x ($1.61 spot rate — $1.59 forward rate)). [The subsequent analysis will show that $300 of the $600 will adjust the inventory that will impact earnings when the inventory is sold, and the remaining $300 will be recognized in earnings through the revaluation process.]

b. November 1, 20X6

Foreign Currency Receivable from Exchange Broker (£)	47,700	
Dollars Payable to Exchange Broker ($)		47,700

Signed 120-day forward contract to hedge foreign currency commitment:
$47,700 = £30,000 x $1.59 forward rate

December 31, 20X6

Foreign Currency Receivable from Exchange Broker (£)	900	
Foreign Currency Transaction Gain		900

Revalue foreign currency receivable to end-of-period fair value:
$48,600 = £30,000 x $1.62 Dec. 31 forward rate
- 47,700 = £30,000 x $1.59 Nov. 1 forward rate
$ 900 = £30,000 x ($1.62 - $1.59)

Foreign Currency Transaction Loss	900	
Firm Commitment		900

Record the loss on the firm commitment:
$900 = £30,000 x ($1.62 - $1.59)

E11-16A (continued)

January 30, 20X7

Foreign Currency Transaction Loss	600	
Foreign Currency Receivable from Exchange Broker (£)		600

Revalue foreign currency receivable to current U.S. dollar equivalent:
$48,000 = £30,000 x $1.60 Jan. 30 forward rate
- 48,600 = £30,000 x $1.62 Dec. 31 forward rate
$ 600 = loss, £30,000 x ($1.60 - $1.62)

Firm Commitment	600	
Foreign Currency Transaction Gain		600

Record the gain on the financial instrument aspect of the firm commitment:
$600 = £30,000 x ($1.60 - $1.62)

Inventory (or Purchases)	47,400	
Firm Commitment	300	
Accounts Payable (£)		47,700

Record foreign currency account payable at spot rate and recognize change in value of the firm commitment as adjustment of purchase price:
$47,700 = £30,000 x $1.59 Jan. 30 spot rate

March 1, 20X7

Foreign Currency Transaction Loss	450	
Foreign Currency Receivable from Exchange Broker (£)		450

Revalue foreign currency receivable to fair value:
$47,550 = £30,000 x $1.585 Mar. 1 spot rate
- 48,000 = £30,000 x $1.60 Jan. 30 forward rate
$ 450 = £30,000 x ($1.585 - $1.60)

Accounts Payable (£)	150	
Foreign Currency Transaction Gain		150

Revalue foreign payable to equivalent U.S. dollar value:
$150 = £30,000 x ($1.585 - $1.59)

Dollars Payable to Exchange Broker ($)	47,700	
Cash		47,700

Deliver U.S. dollars to exchange broker in accordance with forward exchange contract:
$47,700 = £30,000 x $1.59 forward rate

Foreign Currency Units (£)	47,550	
Foreign Currency Receivable from Exchange Broker (£)		47,550

Receive 30,000 pounds from exchange broker:
$47,550 = £30,000 x $1.585 Mar. 1 spot rate

Accounts Payable (£)	47,550	
Foreign Currency Units (£)		47,550

Settle foreign currency payable with 30,000 pounds received from broker.

E11-16A (continued)

c. Considering the time value of money in valuing the forward contract.

November 1, 20X6

Foreign Currency Receivable from Exchange Broker (£)	47,700	
Dollars Payable to Exchange Broker ($)		47,700

Signed 120-day forward contract to hedge foreign currency commitment:
$47,700 = £30,000 x $1.59 forward rate

December 31, 20X6

Foreign Currency Receivable from Exchange Broker (£)	882	
Foreign Currency Transaction Gain		882

Revalue foreign currency receivable to discounted end-of-period fair value:
$48,600 = £30,000 x $1.62 Dec. 31 forward rate
- 47,700 = £30,000 x $1.59 Nov. 1 forward rate
$ 900 = £30,000 x ($1.62 - $1.59)
$ 882 = NPV (.12 x 2/12, 900)

Foreign Currency Transaction Loss	882	
Firm Commitment		882

Record the loss on the financial instrument aspect of the firm commitment:
$882 = NPV (.12 x 2/12, 900)

January 30, 20X7

Foreign Currency Transaction Loss	585	
Foreign Currency Receivable from Exchange Broker (£)		585

Revalue foreign currency receivable to current U.S. dollar equivalent:
$48,000 = £30,000 x $1.60 Jan. 30 forward rate
- 47,700 = £30,000 x $1.59 Nov. 1 forward rate
$ 300 = Cumulative Gain
$ 297 = NPV (.12 x 1/12, 300)
- 882 = gain recognized previously
$ (585) = net change in fair value

Firm Commitment	585	
Foreign Currency Transaction Gain		585

Record the gain on the financial instrument aspect of the firm commitment.

Inventory (or Purchases)	47,403	
Firm Commitment	297	
Accounts Payable (£)		47,700

Record foreign currency account payable at spot rate and recognize change in value of the firm commitment as adjustment of purchase price:
$47,700 = £30,000 x $1.59 Jan. 30 spot rate

E11-16A (continued)

March 1, 20X7

Foreign Currency Transaction Loss	447	
Foreign Currency Receivable from Exchange Broker (£)		447

Revalue foreign currency receivable to fair value:
$47,550 = £30,000 x $1.585 Mar. 1, 20X7, spot rate
- 47,700 = £30,000 x $1.59 Nov. 1, 20X6, forward rate
$ 150 = cumulative, undiscounted loss over term of forward contract
- 297 = previously recognized net gain
$ 447 = loss for period

Accounts Payable (£)	150	
Foreign Currency Transaction Gain		150

Revalue foreign currency payable to equivalent U.S. dollar value:
$150 = £30,000 x ($1.585 - $1.59)

Dollars Payable to Exchange Broker ($)	47,700	
Cash		47,700

Deliver U.S. dollars to exchange broker in accordance with forward exchange contract:
$47,700 = £30,000 x $1.59 forward rate

Foreign Currency Units (£)	47,550	
Foreign Currency Receivable from Exchange Broker (£)		47,550

Receive 30,000 pounds from exchange broker:
$47,550 = £30,000 x $1.585 Mar. 1 spot rate

Accounts Payable (£)	47,550	
Foreign Currency Units (£)		47,550

Settle foreign currency payable with 30,000 pounds received from broker
.

E11-17 Gain or Loss on Speculative Forward Exchange Contract

	12/1/X1	12/31/X1	3/1/X2
	Sign speculative forward exchange contract	Balance Sheet Date	Settlement of speculative forward exchange contract
Forward rate:	€1 = $0.58	€1 = $0.56	
Spot rate:	€1 = $0.60	€1 = $0.59	€1 = $0.57

a. Effects of speculation on 20X1 income:

December 31, 20X1	€120,000 x $0.56 =	$ 67,200
December 1, 20X1	€120,000 x $0.58 =	- 69,600
Speculation gain in 20X1		$ (2,400)

b. Effects of speculation on 20X2 income:

March 1, 20X2	€120,000 x $0.57 =	$ 68,400
December 31, 20X1	€120,000 x $0.56 =	- 67,200
Speculation loss in 20X2		$ 1,200

Foreign Currency Payable (€)

12/31/X1 AJE 2,400	(€120,000 x $0.58 forward rate for 3/1/X2)	12/1/X1	69,600
	(€120,000 x $0.56 forward rate for 3/1/X2)	12/31/X1	67,200
		3/1/X2 AJE	1,200
	(€120,000 x $0.57 spot rate on 3/1/X2)	3/1/X2	68,400

December 31, 20X1

AJE	Foreign Currency Payable (€)	2,400	
	Foreign Exchange Gain		2,400

March 1, 20X2

AJE	Foreign Exchange Loss	1,200	
	Foreign Currency Payable (€)		1,200

E11-18 Speculation in a Foreign Currency

10/1/X1	12/31/X1	3/31/X2
Transaction Date — Enter 180-day speculative forward exchange contract to purchase 50,000,000 yen	Balance Sheet Date	Settlement Date — Settle speculative contract

Forward:	¥1 = \$0.0075	¥1 = \$0.0076	
Spot:	¥1 = \$0.0070	¥1 = \$0.0073	¥1 = \$0.0072

a. October 1, 20X1

Foreign Currency Receivable from Exchange Broker (¥)	375,000	
Dollars Payable to Exchange Broker (\$)		375,000

Sign 180-day forward contract to receive 50,000,000 yen:
\$375,000 = ¥50,000,000 x \$0.0075 forward rate

December 31, 20X1

Foreign Currency Receivable from Exchange Broker (¥)	5,000	
Foreign Currency Transaction Gain		5,000

Revalue speculative forward contract to equivalent end-of-period U.S. dollar value using forward rate on Dec. 31:

\$380,000 = ¥50,000,000 x \$0.0076 Dec. 31 forward rate for Mar. 31, 20X2, settlement
- 375,000 = ¥50,000,000 x \$0.0075 Oct. 1 forward rate for Mar. 31, 20X2, settlement
\$ 5,000 = ¥50,000,000 x (\$0.0076 - \$0.0075)

March 31, 20X2

Foreign Currency Transaction Loss	20,000	
Foreign Currency Receivable from Exchange Broker (¥)		20,000

Revalue speculative forward contract to current date, the end of the contract term, using March 31 spot rate:

\$360,000 = ¥50,000,000 x \$0.0072 Mar. 31 spot rate
- 380,000 = ¥50,000,000 x \$0.0076 Dec. 31 forward rate for Mar. 31, 20X2
\$ 20,000 = ¥50,000,000 x (\$0.0072 - \$0.0076)

Dollars Payable to Exchange Broker (\$)	375,000	
Cash		375,000

Deliver U.S. dollars to exchange broker.

E11-18 (continued)

Foreign Currency Units (¥)	360,000	
Foreign Currency Receivable from Exchange Broker (¥)		360,000

Receive yen from exchange broker:
$360,000 = ¥50,000,000 x $0.0072

Cash	360,000	
Foreign Currency Units (¥)		360,000

Trade yen for dollars, at bank.

b. Streamline Company experienced a net loss of $15,000 ($5,000 gain in 20X1 less a $20,000 loss in 20X2). This may be checked by determining the difference between the dollars paid to the exchange broker on March 31, 20X2, ($375,000) and the U.S. dollar equivalent value of the foreign currency received on March 31 ($360,000).

E11-19 Forward Exchange Transactions [AICPA Adapted]

1. a $400 = 10,000 foreign currency units x ($0.82 - $0.78). The loss is calculated using only forward rates. On December 31, 20X5, the loss is the difference between the 90-day future rate on November 1 ($0.78) and the 30-day future rate on December 31 ($0.82).

2. c $1,000 = 50,000 European euros x ($0.74 - $0.72). The loss is calculated using only forward rates. On September 30, 20X5, the loss is the difference between the 60-day future rate of $0.74 on September 1 and the 30-day future rate of $0.72 on September 30, 20X5.

3. b Manage an exposed position**:**
Value the forward exchange contract (FEC) at its fair value, measured by changes in the forward exchange rate (FER). Note that the question asks only for the effect on income from the forward contract transaction; thus, any effect on income from the foreign currency denominated account payable is not included in the answer.

FER, 12/12/X5 $0.90
FER, 12/31/X5 $0.93
AJE:

Forward Contact Receivable	3,000	
Foreign Exchange Gain		3,000

Revalue forward contract:
$3,000 = Fr 100,000 x ($0.93 - $0.90) change in forward rates

Foreign Exchange Loss	10,000	
Account Payable (Fr)		10,000

Revalue foreign currency payable:
$10,000 = Fr 100,000 x ($0.98 - $0.88) change in spot rates

4. b Hedge of a Firm Commitment:
Value FEC based on changes in forward rate.
AJE:

Forward Contract Receivable	3,000	
Foreign Exchange Gain		3,000

Revalue forward contract, using the forward rates.

Foreign Exchange Loss	3,000	
Firm Commitment		3,000

Recognize loss on firm commitment.

Again, note that the question asks only about the effect on income from the forward contract, not the underlying firm commitment portion of the transaction.

5. b Speculation:
Value forward exchange contract at fair value based on changes in the forward rate.
AJE:

Forward Contract Receivable	3,000	
Foreign Exchange Gain		3,000

SOLUTIONS TO PROBLEMS

P11-20 Multiple-Choice Questions on Foreign Currency Transactions

11/1/X8	12/31/X8	1/30/X9
Transaction Date	Balance Sheet Date	Settlement Date
— Purchase with payable denominated in renminbi — Sign 90-day forward exchange to receive renminbi		— Receive renminbi upon settlement of forward exchange contract — Pay renminbi to settle foreign currency payable

Forward rate:
R 1 = $0.126 R 1 = $0.129

Spot rate:
R 1 = $0.120 R 1 = $0.124 R 1 = $0.127

1. **b** – November 1, 20X8

Foreign Currency Receivable from Exchange Broker (Renminbi)	12,600	
Dollars Payable to Exchange Broker ($)		12,600

Signed 90-day forward exchange contract to purchase 100,000 renminbi:
$12,600 = 100,000 renminbi x $0.126 forward rate

2. **c** – December 31, 20X8

Foreign Currency Receivable from Exchange Broker (Renminbi)	300	
Foreign Currency Transaction Gain		300

Revalue foreign currency receivable to fair value:
$300 = 100,000 renminbi x ($0.129 - $0.126)

3. **b** – January 30, 20X9

Dollars Payable to Exchange Broker ($)	12,600	
Cash		12,600

Deliver U.S. dollars to exchange broker in accordance with forward exchange contract:
$12,600 = 100,000 renminbi x $0.126 contract rate

4. **b** – January 30, 20X9

Dollars Payable to Exchange Broker ($)	12,600	
Cash		12,600

Deliver U.S. dollars to exchange broker in accordance with forward exchange contract:
$12,600 = 100,000 renminbi x $0.126, the 90-day forward rate

P11-20 (continued)

5. **a** – January 30, 20X9

Foreign Currency Transaction Loss	200	
Foreign Currency Receivable from Exchange Broker (Renminbi)		200

Adjust foreign currency receivable to current U.S. dollar equivalent:
$12,700 = 100,000 renminbi x $0.127 Jan. 30 spot rate
- 12,900 = 100,000 renminbi x $0.129 Dec. 31 forward rate
$ 200 = 100,000 renminbi x ($0.127 - $0.129)

Foreign Currency Units (Renminbi)	12,700	
Foreign Currency Receivable from Exchange Broker		12,700

Receive 100,000 renminbi from exchange broker:
$12,700 = 100,000 renminbi x $0.127 spot rate

P11-21 Foreign Sales

1. June 6

Accounts Receivable (Dkr)	21,000	
Sales Revenues		21,000

Foreign sale and foreign currency receivable:
\$21,000 = Dkr120,000 x \$0.175

July 3

Accounts Receivable (Dkr)	36	
Foreign Currency Transaction Gain		36

Revalue foreign currency receivable to U.S. dollar equivalent value:
\$21,036 = Dkr120,000 x \$0.1753 July 3 spot rate
- 21,000 = Dkr120,000 x \$0.1750 June 6 spot rate
\$ 36 = Dkr120,000 x (\$0.1753 - \$0.1750)

Foreign Currency Units (Dkr)	21,036	
Accounts Receivable (Dkr)		21,036

Collect accounts receivable in Dkr.

2. July 22

Accounts Receivable (£)	47,400	
Sales Revenue		47,400

Foreign sale and foreign currency receivable:
\$47,400 = £30,000 x \$1.58

Dollars Receivable from Exchange Broker (\$)	48,900	
Foreign Currency Payable to Exchange Broker (£)		48,900

Signed 60-day forward contract to sell pounds:
\$48,900 = £30,000 x \$1.63 forward rate

September 20

Accounts Receivable (£)	960	
Foreign Currency Transaction Gain		960

Revalue foreign currency receivable:
\$48,360 = £30,000 x \$1.612 Sept. 20 spot rate
- 47,400 = £30,000 x \$1.58 July 22 spot rate
\$ 960 = £30,000 x (\$1.612 - \$1.58)

Foreign Currency Payable to Exchange Broker (£)	540	
Foreign Currency Transaction Gain		540

Revalue foreign currency payable:
\$48,360 = £30,000 x \$1.612 Sept. 20 spot rate
- 48,900 = £30,000 x \$1.630 July 22 forward rate
\$ 540 = £30,000 x (\$1.612 - \$1.630)

Foreign Currency Units (£)	48,360	
Accounts Receivable (£)		48,360

Receive pounds from customer.

P11-21 (continued)

Foreign Currency Payable to Exchange Broker (£)	48,360	
Foreign Currency Units (£)		48,360

Deliver pounds to broker.

Cash	48,900	
Dollars Receivable from Exchange Broker ($)		48,900

Receive U.S. dollars from broker in accordance with forward contract.

3. October 11

Accounts Receivable (C$)	51,450	
Sales Revenue		51,450

Sale to Canadian firm denominated in Canadian dollars:
C$70,000 x $0.735

Dollars Receivable from Exchange Broker ($)	51,100	
Foreign Currency Payable to Exchange Broker (C$)		51,100

Sign 60-day forward contract to sell Canadian dollars:
$51,100 = C$70,000 x $0.730 forward rate

November 10

Foreign Currency Transaction Loss	210	
Accounts Receivable (C$)		210

Revalue foreign currency receivable to equivalent U.S. dollar value:
$51,240 = C$70,000 x $0.732 Nov. 10 spot rate
- 51,450 = C$70,000 x $0.735 Oct. 11 spot rate
$ 210 = C$70,000 x ($0.732- $0.735)

Foreign Currency Transaction Loss	140	
Foreign Currency Payable to Exchange Broker (C$)		140

Revalue foreign currency payable:
$51,240 = C$70,000 x $0.732 Nov. 10 spot rate
- 51,100 = C$70,000 x $0.730 Oct. 11 forward rate
$ 140 = C$70,000 x ($0.732 - $0.730)

Foreign Currency Units (C$)	51,240	
Accounts Receivable (C$)		51,240

Receive Canadian dollars from customer:
$51,240 = C$70,000 x $0.732 Nov. 10 spot rate.

Foreign Currency Payable to Exchange Broker (C$)	51,240	
Foreign Currency Units (C$)		51,240

Deliver Canadian dollars to broker.

Cash	51,100	
Dollars Receivable from Exchange Broker ($)		51,100

Receive U.S. dollars from broker in accordance with forward contract rate.

P11-22 Foreign Currency Transactions

1. January 15

Accounts Receivable	7,400	
Sales Revenue		7,400

Foreign export denominated in U.S. dollars.

March 15

Cash	7,400	
Accounts Receivable		7,400

Collect receivable from South Korean firm.

2. March 8

Inventory (or Purchases)	4,354	
Accounts Payable (€)		4,354

Foreign inventory purchase with payable denominated in foreign currency:
$4,354 = €7,000 x $0.622

May 1

Accounts Payable (€)	84	
Foreign Currency Transaction Gain		84

Revalue foreign currency payable to current U.S. dollar equivalent:
$4,270 = €7,000 x $0.610 May 1 spot rate
- 4,354 = €7,000 x $0.622 Mar. 8 spot rate
$ 84 = €7,000 x ($0.622 - $0.610)

Globe Shipping must settle the payable in foreign currency units. Foreign currency units or foreign currency drafts (checks written in terms of foreign currency units) may be obtained from most major banks.

Accounts Payable (€)	4,270	
Foreign Currency Units (€)		4,270

Settlement of foreign currency payable:
$4,270 = €7,000 x $0.610 May 1 spot rate

3. May 12

Foreign Currency Rec. from Exchange Broker (NT$)	3,008	
Dollars Payable to Exchange Broker ($)		3,008

Signed 120-day forward contract to hedge a foreign currency commitment: $3,008 = NT$80,000 x $0.0376 forward rate

P11-22 (continued)

August 1

Foreign Currency Receivable from Exchange Broker (NT$)	16	
Foreign Currency Transaction Gain		16

Revalue foreign currency receivable to fair value
$3,024 = NT$80,000 x $0.0378 Aug. 1 forward rate
- 3,008 = NT$80,000 x $0.0376 May 12 forward rate
$ 16 = NT$80,000 x ($0.0378 - $0.0376)

Foreign Currency Transaction Loss	16	
Firm Commitment		16

Record the loss on the financial statement aspect of the firm commitment:
$16 = NT$80,000 x ($0.0378 - $0.0376)

Inventory (or Purchases)	2,984	
Firm Commitment	16	
Accounts Payable (NT$)		3,000

Receipt of goods and adjustment of inventory cost by deferrals:
$3,000 = NT$80,000 x $0.0375 Aug. 1 spot rate

September 9

Foreign Currency Transaction Loss	48	
Foreign Currency Receivable from Exchange Broker (NT$)		48

Revalue foreign currency receivable to fair value:
$2,976 = NT$80,000 x $0.0372 Sept. 9 spot rate
- 3,024 = NT$80,000 x $0.0378 Aug. 1 forward rate
$ 48 = NT$80,000 x ($0.0372 - $0.0378)

Accounts Payable (NT$)	24	
Foreign Currency Transaction Gain		24

Revalue foreign currency payable:
$24 = NT$80,000 x ($0.0372 - $0.0375)

Dollars Payable to Exchange Broker ($)	3,008	
Cash		3,008

Deliver U.S. dollars to forward exchange broker.

Foreign Currency Units (NT$)	2,976	
Foreign Currency Receivable from Exchange Broker (NT$)		2,976

Receive Taiwan dollars from exchange broker:
$2,976 = NT$80,000 x $0.0372 Sept. 9 spot rate.

Accounts Payable (NT$)	2,976	
Foreign Currency Units (NT$)		2,976

Settle foreign currency payable.

P11-22 (continued)

4. June 6

Accounts Receivable (€)	90,000	
Sales Revenues		90,000

Export sale denominated in euros:
$90,000 = €150,000 x $0.600

July 6

Dollars Receivable from Exchange Broker ($)	87,000	
Foreign Currency Payable to Exchange Broker (€)		87,000

Signed 60-day forward contract to deliver euros:
$87,000 = €150,000 x $0.580 forward rate

September 4

Foreign Currency Transaction Loss	2,250	
Accounts Receivable (€)		2,250

Revalue foreign currency receivable to equivalent U.S. dollar value:
$87,750 = €150,000 x $0.585 Sept. 4 spot rate
- 90,000 = €150,000 x $0.600 June 6 spot rate
$ 2,250 = €150,000 x ($0.585 - $0.600)

Foreign Currency Transaction Loss	750	
Foreign Currency Payable to Exchange Broker (€)		750

Revalue foreign currency payable for loss since July 6:
$87,750 = €150,000 x $0.585 Sept. 4 spot rate
- 87,000 = €150,000 x $0.580 July 6 forward rate
$ 750 = €150,000 x ($0.585 - $0.580)

Foreign Currency Units (€)	87,750	
Accounts Receivable (€)		87,750

Receive euros from customer:
$87,750 = €150,000 x $0.585 Sept. 4 spot rate.

Foreign Currency Payable to Exchange Broker (€)	87,750	
Foreign Currency Units (€)		87,750

Deliver euros to exchange broker.

Cash	87,000	
Dollars Receivable from Exchange Broker ($)		87,000

Receive U.S. dollars from broker in accordance with forward contract signed on July 6:
$87,000 = €150,000 x $0.580 forward contract rate.

P11-23A Comprehensive Problem: Four Uses of Forward Exchange Contracts without and with Time Value of Money Considerations

a. Use of forward contract to manage foreign currency risk of exposed foreign currency position. Not designated as a hedge.

12/1/X1	12/31/X1	3/31/X2
Transaction Date	Balance Sheet Date	Settlement Date
— Purchase of furniture resulting in foreign currency payable — Sign foreign exchange contract to receive Australian dollars on March 31		— Settle forward exchange contract and receive 100,000 Australian dollars — Pay foreign currency payable

Forward rate:	A\$1 = \$0.609	A\$1 = \$0.612	
Spot rate:	A\$1 = \$0.600	A\$1 = \$0.610	A\$1 = \$0.602

December 1, 20X1

Inventory (or Purchases)	60,000	
Accounts Payable (A$)		60,000

Foreign currency payable:
$60,000 = A$100,000 x $0.600

Foreign Currency Receivable from Exchange Broker (A$)	60,900	
Dollars Payable to Exchange Broker ($)		60,900

Signed forward exchange contract to manage exposed foreign currency payable:
$60,900 = A$100,000 x $0.609 forward rate

December 31, 20X1

Foreign Currency Transaction Loss	1,000	
Accounts Payable (A$)		1,000

Revalue foreign currency payable to equivalent U.S. dollar value:
$61,000 = A$100,000 x $0.610 Dec. 31 spot rate
- 60,000 = A$100,000 x $0.600 Dec. 1 spot rate
$ 1,000 = A$100,000 x ($0.610 - $0.600)

Foreign Currency Receivable from Exchange Broker (A$)	300	
Foreign Currency Transaction Gain		300

Revalue foreign currency receivable:
$61,200 = A$100,000 x $0.612 Dec. 31 forward rate
- 60,900 = A$100,000 x $0.609 Dec. 1 forward rate
$ 300 = A$100,000 x ($0.612 - $0.609)

P11-23A (continued)

Note: For this case, no entry necessary on January 30, 20X2.

March 31, 20X2

Foreign Currency Transaction Loss	1,000	
Foreign Currency Receivable from Exchange Broker (A$)		1,000

Revalue foreign currency receivable:
$60,200 = A$100,000 x $0.602 Mar. 31, 20X2, spot rate
- 61,200 = A$100,000 x $0.612 Dec. 31, 20X1, forward rate
$ 1,000 = A$100,000 x ($0.602 - $0.612)

Accounts Payable (A$)	800	
Foreign Currency Transaction Gain		800

Revalue foreign currency payable:
$60,200 = A$100,000 x $0.602 Mar. 31, 20X2, spot rate
- 61,000 = A$100,000 x $0.610 Dec. 31, 20X1, spot rate
$ 800 = A$100,000 x ($0.602 - $0.610)

Dollars Payable to Exchange Broker ($)	60,900	
Cash		60,900

Deliver U.S. dollars to exchange broker as required by forward contract.

Foreign Currency Units (A$)	60,200	
Foreign Currency Receivable from Exchange Broker (A$)		60,200

Receive A$100,000 from exchange broker in accordance with forward contract:
$60,200 = A$100,000 x $0.602 Mar. 31 spot rate.

Accounts Payable (A$)	60,200	
Foreign Currency Units (A$)		60,200

Deliver A$100,000 to creditor.

b. Use of forward contract as fair value hedge of foreign currency firm commitment.

	12/1/X1	12/31/X1	1/30/X2	3/31/X2
	Commitment Date	Balance Sheet Date	Transaction Date	Settlement Date
	— Sign foreign exchange contract to hedge foreign currency payable firm commitment		— Purchase of furniture resulting in foreign currency payable	— Settle foreign currency commitment and receive A$100,000 — Pay foreign currency
Forward rate:	A$1 = $0.609	A$1 = $0.612	A$1 = $0.605	
Spot rate:	A$1 = $0.600	A$1 = $0.610	A$1 = $0.608	A$1 = $0.602

P11-23A (continued)

December 1, 20X1

Foreign Currency Receivable from Exchange Broker (A$)	60,900	
Dollars Payable to Exchange Broker ($)		60,900

Signed 120-day forward contract to hedge foreign currency commitment to purchase furniture on January 30 for A$100,000:
$60,900 = A$100,000 x $0.609 forward rate

December 31, 20X1

Foreign Currency Receivable from Exchange Broker (A$)	300	
Foreign Currency Transaction Gain		300

Revalue foreign currency receivable to fair value:
$61,200 = A$100,000 x $0.612 Dec. 31 forward rate
- 60,900 = A$100,000 x $0.609 Dec. 1 forward rate
$ 300 = A$100,000 x ($0.612 - $0.609)

Foreign Currency Transaction Loss	300	
Firm Commitment		300

Record the loss on the financial instrument aspect of the firm commitment:
$300 = A$100,000 x ($0.612 - $0.609)

January 30, 20X2

Foreign Currency Transaction Loss	700	
Foreign Currency Receivable from Exchange Broker (A$)		700

Revalue foreign currency receivable to current U.S. dollar equivalent:
$60,500 = A$100,000 x $0.605 Jan. 30, 20X2, forward rate
- 61,200 = A$100,000 x $0.612 Dec. 31, 20X1, forward rate
$ 700 = A$100,000 x ($0.605 - $0.612)

Firm Commitment	700	
Foreign Currency Transaction Gain		700

Record the gain on the financial instrument aspect of the firm commitment:
$700 = A$100,000 x ($0.605 - $0.612)

Inventory (or Purchases)	61,200	
Firm Commitment		400
Accounts Payable (A$)		60,800

Acquire furniture initially committed to on December 1, 20X1:
$60,800 = A$100,000 x $0.608 spot rate

P11-23A (continued)

March 31, 20X2

Foreign Currency Transaction Loss	300	
Foreign Currency Receivable from Exchange Broker (A$)		300

Revalue foreign currency receivable:
$60,200 = A$100,000 x $0.602 Mar. 31 spot rate
- 60,500 = A$100,000 x $0.605 Jan. 30 forward rate
$ 300 = A$100,000 x ($0.602 - $0.605)

Accounts Payable (A$)	600	
Foreign Currency Transaction Gain		600

Revalue foreign currency payable:
$60,200 = A$100,000 x $0.602 Mar. 31 spot rate
- 60,800 = A$100,000 x $0.608 Jan. 30 spot rate
$ 600 = A$100,000 x ($0.602 - $0.608)

Dollars Payable to Exchange Broker ($)	60,900	
Cash		60,900

Deliver U.S. dollars to exchange broker.

Foreign Currency Units (A$)	60,200	
Foreign Currency Receivable from Exchange Broker (A$)		60,200

Receive A$100,000 from broker in accordance with forward contract signed on December 1:
$60,200 = A$100,000 x $0.602 Mar. 31 spot rate.

Accounts Payable (A$)	60,200	
Foreign Currency Units (A$)		60,200

Deliver A$100,000 to foreign creditor.

P-11-23A (continued)

c. Use of forward contract as cash flow hedge of forecasted foreign currency transaction.

12/1/X1	12/31/X1	1/30/X2	3/31/X2
Commitment Date	Balance Sheet Date	Transaction Date	Settlement Date
— Sign foreign exchange contract to hedge forecasted foreign currency transaction.		— Purchase of furniture resulting in foreign currency payable	— Settle foreign currency commitment and receive A$100,000 — Pay foreign currency payable

Forward rate:

A$1 = $0.609	A$1 = $0.612	A$1 = $0.605	

Spot rate:

A$1 = $0.600	A$1 = $0.610	A$1 = $0.608	A$1 = $0.602

December 1, 20X1

Foreign Currency Receivable from Exchange Broker (A$)	60,900	
Dollars Payable to Exchange Broker ($)		60,900

Signed 120-day forward contract as a cash flow hedge of the forecasted foreign currency transaction of the purchase of furniture on January 30 for A$100,000:
$60,900 = A$100,000 x $0.609 forward rate

December 31, 20X1

Foreign Currency Receivable from Exchange Broker (A$)	300	
Other Comprehensive Income		300

Revalue foreign currency receivable to fair value and record OCI for effective portion of change in fair value of the derivative designated as a cash flow hedge:
$61,200 = A$100,000 x $0.612 Dec. 31 forward rate
- 60,900 = A$100,000 x $0.609 Dec. 1 forward rate
$ 300 = A$100,000 x ($0.612 - $0.609)

P11-23A (continued)

January 30, 20X2

Other Comprehensive Income	700	
Foreign Currency Receivable from Exchange Broker (A$)		700

Revalue foreign currency receivable to current U.S. dollar equivalent and record OCI for the effective portion of the change in fair value of the derivative designated as a cash flow hedge:

$60,500 = A$100,000 x $0.605 Jan. 30, 20X2, forward rate
- 61,200 = A$100,000 x $0.612 Dec. 31, 20X1, forward rate
$ 700 = A$100,000 x ($0.605 - $0.612)

Inventory (or Purchases)	60,800	
Accounts Payable (A$)		60,800

Acquire furniture and value at spot rate:
$60,800 = A$100,000 x $0.608 spot rate

March 31, 20X2

Other Comprehensive Income	300	
Foreign Currency Receivable from Exchange Broker (A$)		300

Revalue foreign currency receivable and record into OCI the effective portion of change in fair value of derivative designated as a cash flow hedge:

$60,200 = A$100,000 x $0.602 Mar. 31 spot rate
- 60,500 = A$100,000 x $0.605 Jan. 30 forward rate
$ 300 = A$100,000 x ($0.602 - $0.605)

Accounts Payable (A$)	600	
Foreign Currency Transaction Gain		600

Revalue foreign currency payable using spot rate and recognizing change into current earnings as specified by **ASC 830**:

$60,200 = A$100,000 x $0.602 Mar. 31 spot rate
- 60,800 = A$100,000 x $0.608 Jan. 30 spot rate
$ 600 = A$100,000 x ($0.602 - $0.608)

Foreign Currency Transaction Loss	600	
Other Comprehensive Income		600

In accordance with **ASC 815**, reclassify amount from OCI sufficient to completely offset the foreign currency transaction gain on the foreign currency payable (A$) that was hedged with a derivative designated as a cash flow hedge.

Dollars Payable to Exchange Broker ($)	60,900	
Cash		60,900

Deliver U.S. dollars to exchange broker.

Foreign Currency Units (A$)	60,200	
Foreign Currency Receivable from Exchange Broker (A$)		60,200

Receive A$100,000 from broker in accordance with forward contract signed on December 1:
$60,200 = A$100,000 x $0.602 Mar. 31 spot rate.

P11-23A (continued)

Accounts Payable (A$)	60,200	
Foreign Currency Units (A$)		60,200

Deliver A$100,000 to foreign creditor.

Note: At this point there is still a debit balance of $100 in Other Comprehensive Income. This balance will be reclassified into earnings at the time the inventory is sold which is the completion of the earnings process of the purchase of the inventory.

d. Forward contract used for speculative purposes only.

	12/1/X1	12/31/X1	3/31/X2
	Transaction Date	Balance Sheet Date	Settlement Date
	— Sign 120 day speculative contract to purchase 100,000 Australian dollars.		— Settle forward exchange contract and receive A$100,000
Forward rate:	A$1 = $0.609	A$1 = $0.612	
Spot rate:	A$1 = $0.600	A$1 = $0.610	A$1 = $0.602

December 1, 20X1

Foreign Currency Receivable from Exchange Broker (A$)	60,900	
Dollars Payable to Exchange Broker ($)		60,900

Signed 120-day forward contract for speculation:
$60,900 = A$100,000 x $0.609

December 31, 20X1

Foreign Currency Receivable from Exchange Broker (A$)	300	
Foreign Currency Transaction Gain		300

Revalue foreign currency receivable to equivalent U.S. dollar value:
$61,200 = A$100,000 x $0.612 Dec. 31 forward rate
- 60,900 = A$100,000 x $0.609 Dec. 1 forward rate
$ 300 = A$100,000 x ($0.612 - $0.609)

March 31, 20X2

Foreign Currency Transaction Loss	1,000	
Foreign Currency Receivable from Exchange Broker (A$)		1,000

Revalue foreign currency receivable:
$60,200 = A$100,000 x $0.602 Mar. 31, 20X2, spot rate
- 61,200 = A$100,000 x $0.612 Dec. 31, 20X1, forward rate
$ 1,000 = A$100,000 x ($0.602 - $0.612)

Dollars Payable to Exchange Broker ($)	60,900	
Cash		60,900

Deliver U.S. dollars to forward exchange broker.

P11-23A (continued)

Foreign Currency Units (A$)	60,200	
Foreign Currency Receivable from Exchange Broker (A$)		60,200

Receive A$100,000 from exchange broker:
$60,200 = A$100,000 x $0.602 spot rate

e. Use of forward contract to manage exposed foreign currency position, considering the time value of money at a 12 percent annual rate. Forward contract not designated as a hedge.

12/1/X1	12/31/X1	3/31/X2
Transaction Date	Balance Sheet Date	Settlement Date
— Purchase of furniture resulting in foreign currency payable — Sign hedging foreign exchange contract to receive Australian dollars on March 31		— Settle forward exchange contract and receive A$100,000 — Pay foreign currency payable
Forward rate: A$1 = $0.609	A$1 = $0.612	
Spot rate: A$1 = $0.600	A$1 = $0.610	A$1 = $0.602

December 1, 20X1

Inventory (or Purchases)	60,000	
Accounts Payable (A$)		60,000

Foreign currency payable: $60,000 = A$100,000 x $0.600

Foreign Currency Receivable from Exchange Broker (A$)	60,900	
Dollars Payable to Exchange Broker ($)		60,900

Signed forward exchange contract to hedge exposed foreign currency payable:
$60,900 = A$100,000 x $0.609 forward rate

December 31, 20X1

Foreign Currency Transaction Loss	1,000	
Accounts Payable (A$)		1,000

Revalue foreign currency payable to equivalent U.S. dollar value:
$61,000 = A$100,000 x $0.610 Dec. 31 spot rate
- 60,000 = A$100,000 x $0.600 Dec. 1 spot rate
$ 1,000 = A$100,000 x ($0.610 - $0.600)

P11-23A (continued)

Foreign Currency Receivable from Exchange Broker (A$)	291	
Foreign Currency Transaction Gain		291

Revalue foreign currency receivable:
$61,200 = A$100,000 x $0.612 Dec. 31 forward rate
- 60,900 = A$100,000 x $0.609 Dec. 1 forward rate
$ 300 = A$100,000 x ($0.612 - $0.609) cumulative, undiscounted gain from Dec. 1
$ 291 = NPV (.12 x 3/12, 300) for remaining 3 months from 12/31/X1 — 3/31/X2

Note: For this case, no entry necessary on January 30, 20X2.

March 31, 20X2

Foreign Currency Transaction Loss	991	
Foreign Currency Receivable from Exchange Broker (A$)		991

Revalue foreign currency receivable:
$60,200 = A$100,000 x $0.602 Mar. 31, 20X2, spot rate
- 60,900 = A$100,000 x $0.609 Dec. 1, 20X1, forward rate
$ (700) = cumulative, undiscounted loss over term of forward contract
- 291 = gain previously recognized on Dec. 31, 20X1
$ (991) = change in fair value this period

Accounts Payable (A$)	800	
Foreign Currency Transaction Gain		800

Revalue foreign currency payable:
$60,200 = A$100,000 x $0.602 Mar. 31, 20X2, spot rate
- 61,000 = A$100,000 x $0.610 Dec. 31, 20X1, spot rate
$ 800 = A$100,000 x ($0.602 - $0.610)

Dollars Payable to Exchange Broker ($)	60,900	
Cash		60,900

Deliver U.S. dollars to exchange broker as required by forward contract.

Foreign Currency Units (A$)	60,200	
Foreign Currency Receivable from Exchange Broker (A$)		60,200

Receive A$100,000 from exchange broker in accordance with forward contract:
$60,200 = A$100,000 x $0.602 Mar. 31 spot rate.

Accounts Payable (A$)	60,200	
Foreign Currency Units (A$)		60,200

Deliver A$100,000 to creditor.

P11-24 Foreign Purchases and Sales Transactions and Hedging

Part I

a. Journal entries for Maple's import and export transactions during 20X5 and 20X6:

1. March 1, 20X5

Accounts Receivable (C$)	19,500	
Sales		19,500

$19,500 = C$30,000 x $0.65 spot rate

May 30, 20X5

Accounts Receivable (C$)	900	
Foreign Currency Transaction Gain		900

$900 = C$30,000 x ($0.68 - .65)

Foreign Currency Units (C$)	20,400	
Accounts Receivable (C$)		20,400

$20,400 = C$30,000 x $0.68

Cash	20,400	
Foreign Currency Units (C$)		20,400

2. July 1, 20X5

No entry is recorded when the contract to purchase equipment is signed.

August 30, 20X5

Equipment	52,000	
Accounts Payable (¥)		52,000

$52,000 = ¥500,000 x $0.104

October 29, 20X5

Foreign Currency Transaction Loss	1,000	
Accounts Payable (¥)		1,000

$1,000 = ¥500,000 x ($0.106 - $0.104)

Foreign Currency Units (¥)	53,000	
Cash		53,000

$53,000 = ¥500,000 x $0.106

Accounts Payable (¥)	53,000	
Foreign Currency Units (¥)		53,000

P11-24 (continued)

3. November 16, 20X5

Inventory	16,500	
Accounts Payable (£)		16,500

$16,500 = £10,000 x $1.65

December 31, 20X5

Accounts Payable (£)	200	
Foreign Currency Transaction Gain		200

$200 = £10,000 x ($1.63 - $1.65)

January 15, 20X6

Foreign Currency Transaction Loss	100	
Accounts Payable (£)		100

$100 = £10,000 x ($1.64 - $1.63)

Foreign Currency Units (£)	16,400	
Cash		16,400

$16,400 = £10,000 x $1.64

Accounts Payable (£)	16,400	
Foreign Currency Units (£)		16,400

b. Maple should report a foreign currency transaction gain of $100 on its income statement for 20X5. This amount is computed as follows:

Foreign currency transaction gain from transaction denominated in pounds	$ 200
Foreign currency transaction gain from transaction denominated in Canadian dollars	900
Less foreign currency transaction loss from transaction denominated in yen	(1,000)
Foreign currency transaction gain for 20X5	$ 100

P11-24 (continued)

Part II

a. 1. Journal entries for the use of a forward contract to manage the foreign currency exposure of the sale in Canadian dollars:

March 1, 20X5

Dollars Receivable from Exchange Broker	19,200	
Foreign Currency Payable to Exchange Broker (C$)		19,200

$19,200 = C$30,000 x $0.64 forward rate

May 30, 20X5

Foreign Currency Transaction Loss	1,200	
Foreign Currency Payable to Exchange Broker (C$)		1,200

$20,400 = C$30,000 x $0.68 May 30 spot rate
- 19,200 = C$30,000 x $0.64 March 1 forward rate
$ 1,200 = C$ 30,000 x ($0.68 - $0.64)

Foreign Currency Payable to Exchange Broker (C$)	20,400	
Foreign Currency Units (C$)		20,400

Cash	19,200	
Dollars Receivable from Exchange Broker		19,200

P11-24 Part II (continued)

a. 2. Journal entries for the fair value hedge of the firm commitment in Japanese yen.

July 1, 20X5

Foreign Currency Receivable from Exchange Broker (¥)	52,500	
Dollars Payable to Exchange Broker		52,500

$52,500 = ¥500,000 x $0.105 July 1 forward rate

August 30, 20X5

Foreign Currency Receivable from Exchange Broker (¥)	250	
Foreign Currency Transaction Gain		250

$52,750 = ¥500,000 x $0.1055 Aug. 30 forward rate
$52,500 = ¥500,000 x $0.1050 July 1 forward rate
$ 250 = ¥500,000 x ($0.1055 - $0.1050)

Foreign Currency Transaction Loss	250	
Firm Commitment		250

Record loss on financial instrument aspect of firm commitment:
$250 = ¥500,000 x ($0.1055 - $0.1050)

Equipment	51,750	
Firm Commitment	250	
Accounts Payable (¥)		52,000

$52,000 = ¥500,000 x $0.104 Aug. 30 spot rate

October 29, 20X5

Foreign Currency Receivable from Exchange Broker (¥)	250	
Foreign Currency Transaction Gain		250

$53,000 = ¥500,000 x $0.1060 Oct. 29 spot rate
- 52,750 = ¥500,000 x $0.1055 Aug. 30 forward rate
$ 250 = ¥500,000 x ($0.1060 - $0.1055)

Dollars Payable to Exchange Broker	52,500	
Cash		52,500

Foreign Currency Units (¥)	53,000	
Foreign Currency Receivable from Exchange Broker (¥)		53,000

$53,000 = ¥500,000 x $0.106 Oct. 29 spot rate

P11-24 Part II (continued)

a. 3. Journal entries for the use of a forward contract to manage its foreign currency exposure in pounds. The forward contract is not designated as a hedge.

November 16, 20X5

Foreign Currency Receivable from Exchange Broker (£)	16,700	
Dollars Payable to Exchange Broker		16,700

$16,700 = £10,000 x $1.67 Nov. 16 forward rate

December 31, 20X5

Foreign Currency Transaction Loss	250	
Foreign Currency Receivable from Exchange Broker (£)		250

$16,450 = £10,000 x $1.645 Dec. 31 forward rate
- 16,700 = £10,000 x $1.67 Nov. 16 forward rate
$ 250 = £10,000 x ($1.645 - $1.67)

January 15, 20X6

Foreign Currency Transaction Loss	50	
Foreign Currency Receivable from Exchange Broker (£)		50

$16,400 = £10,000 x $1.640 Jan. 5 spot rate
16,450 = £10,000 x $1.645 Dec. 31 forward rate
$ 50 = £10,000 x ($1.640 - $1.645)

Dollars Payable to Exchange Broker	16,700	
Cash		16,700

Foreign Currency Units (£)	16,400	
Foreign Currency Receivable from Exchange Broker (£)		16,400

b. Maple would report a net loss in 20X5 of $1,100, as follows:

20X5	Loss		Gain
Transaction 1			
May 30 Part I	-		900
May 30 Part II	1,200		-
Transaction 2			
Aug. 30, 20X5 — Part II	250		250
Oct. 29, 20X5 — Part I	1,000		-
Oct. 29, 20X5 — Part II	-		250
Transaction 3			
Dec. 31, 20X5 Part I	-		200
Dec. 31, 20X5 Part II	250		-
20X5, Net Loss		1,100	

P11-24 Part II (continued)

c. Maple would report a net loss in 20X6, of $150, as follows:

20X6	Loss	Gain
Transaction 3		
Jan. 15, 20X6 — Part I	100	-
Jan. 15, 20X6 — Part II	50	-
20X6, Net Loss	150	-0-

P11-25 Understanding Foreign Currency Transactions

a. Indirect exchange rates for Australian dollars were:
December 1, 20X5: A$70,000 / $42,000 = 1.667 [$1 equals A$1.667]
December 31, 20X5: A$70,000 / $41,700 = 1.679 [$1 equals A$1.679]

b. The balance in the account Foreign Currency Payable to Exchange Broker was $39,900 at December 31, 20X5, computed as:
$39,900 = A$70,000 x $0.57 Dec. 31 forward rate

c. The direct exchange rate for the 60-day forward contract for the 70,000 Australian dollars was A$1 = $0.58. This is the result of the following computation:
($40,600 / A$70,000) = $0.58.

d. $40,600 is the amount of Dollars Receivable from Exchange Broker in the adjusted trial balance at December 31, 20X5. The balance in this account does not change because it is denominated in U.S. dollars.

e. Indirect spot exchange rates for South Korean wons were:
October 2: KRW400,000 / $80,000 = 5 [$1 equals KRW5]
December 31: KRW400,000 / $80,800 = 4.950 [$1 equals KRW 4.950]
Or, 4.950 = KRW1 / $0.2020

f. The Dollars Payable to Exchange Broker was $82,000 in both the adjusted and unadjusted trial balances. The entry to record the forward contract for the 400,000 South Korean wons on October 2, 20X5, appears below. Note that the account Dollars Payable to Exchange Broker is denominated in U.S. dollars and does not change as a result of exchange rate changes.

Foreign Currency Receivable from Exchange Broker (KRW)	82,000	
Dollars Payable to Exchange Broker ($)		82,000

g. The direct exchange rate for the 120-day forward contract in South Korean wons on October 2, 20X5, was $0.205. This amount is determined in the following manner: $82,000 / KRW400,000 = $0.205. The $82,000 is the amount of the dollars payable to exchange broker. This amount is computed by using the forward rate.

P11-25 (continued)

h. The accounts payable balance was $80,800 at December 31, 20X5.
$80,800 = KRW400,000 x $0.2020 Dec. 31 spot rate
The entries to support the computations for Problem 11-25 are presented below.

1. Transactions with Australian company

December 1, 20X5

Accounts Receivable (A$)	42,000	
Sales		42,000

$42,000 = A$70,000 x ($1/A$1.667)

Dollars Receivable from Exchange Broker	40,600	
Foreign Currency Payable to Exchange Broker (A$)		40,600

$40,600 = A$70,000 x $0.58 Dec. 1 forward rate, and also dollar amount stated in problem information($0.58 = $40,600 / A$70,000)

December 31, 20X1

Foreign Currency Transaction Loss	300	
Accounts Receivable (A$)		300

$300 = change in accounts receivable (A$) as noted in problem information.

Foreign Currency Payable to Exchange Broker	700	
Foreign Currency Transaction Gain		700

$39,900 = A$70,000 x $0.57 Dec. 31 forward rate
- 40,600 = A$70,000 x $0.58 Dec. 1 forward rate
$ 700 = A$70,000 x ($0.57 - $0.58)

2. Transactions with South Korean company

October 2, 20X5

Equipment	80,000	
Accounts Payable (KRW)		80,000

$80,000 = KRW400,000 x $0.20

Foreign Currency Receivable from Exchange Broker (KRW)	82,000	
Dollars Payable to Exchange Broker		82,000

$82,000 = KRW400,000 x $0.2050, and the$82,000 is presented in the problem for the foreign currency receivable.

December 31, 20X5

Foreign Currency Transaction Loss	800	
Accounts Payable (KRW)		800

$80,800 = KRW400,000 x $0.202 Dec. 31 spot rate
- 80,000 = KRW400,000 x $0.200 October 2 spot rate
$ 800 = KRW400,000 x ($0.202 - $0.200)

Foreign Currency Transaction Loss	1,000	
Foreign Currency Receivable from Exchange Broker		1,000

$81,000 = KRW400,000 x $0.2025 Dec. 31 forward rate
- 82,000 = KRW400,000 x $0.2050 Oct. 2 forward rate
$ 1,000 = KRW400,000 x ($0.2025 - $0.2050)

P11-26 Matching Key Terms

1. E
2. H
3. F
4. A
5. I
6. L
7. O
8. B
9. M
10. C
11. N
12. K
13. J
14. G
15. D

P11-27B Multiple-Choice Questions on Derivatives and Hedging Activities

1. **d** – An underlying is a financial or physical variable that has observable or objectively verifiable changes. The number of currency units is considered a notional amount within the financial instrument.

   (a) *Incorrect*. A security price is observable and verifiable, therefore it is an underlier.
   (b) *Incorrect.* A monthly average temperature is observable and verifiable, therefore it is an underlier.
   (c) *Incorrect.* A price of a barrel of oil is observable and verifiable, therefore it is an underlier.

2. **c** – Because the increase in value is unrealized, it would be recorded as an increase to OCI. This only applies to a cash flow hedge.

   (a) *Incorrect*. Even before it has been realized, it is still recorded through OCI.
   (b) *Incorrect.* Current earnings would be adjusted for fair value hedges, not cash flow hedges.
   (d) *Incorrect.* Deferred income accounts are not used for unrealized gains or losses.

3. **c** – The net investment must be *less* than that required for other Types, not equal.

   (a) *Incorrect*. This is a required element of a derivative instrument.
   (b) *Incorrect.* This is a required element of a derivative instrument.
   (d) *Incorrect.* This is a required element of a derivative instrument.

4. **a** – The change for fair value hedges goes to current earnings, while changes in cash flow hedges go to other comprehensive income.

   (b) *Incorrect*. Even before the exchange transaction takes place, the changes must be reflected.
   (c) *Incorrect.* Decreases in other comprehensive income only occur with cash flow hedges.
   (d) *Incorrect.* Earnings should be decreased for fair value hedges.

5. **b** – Only fair value hedges will reflect the changes in the fair value of the effective portion of a hedhing instrument and be recorded as a part of current earnings for the period.

6. **c** – Trading securities do not qualify for hedge accounting under ASC 815.

   (a) *Incorrect*. The use of hedge accounting for forecasted purchases or sales is allowed under ASC 815.
   (b) *Incorrect.* The use of hedge accounting for available for sale securities ia allowed under ASC 815.
   (d) *Incorrect.* The use of hedge accounting for unrecognized firm commitments is allowed under ASC 815.

P11-28B A Cash Flow Hedge: Use of an Option to Hedge an Anticipated Purchase.

a. Entry to record the purchase of the call options on November 30, 20X1:

November 30, 20X1

Purchased Call Options	20,000	
Cash		20,000

Purchase call options for 10,000 barrels of oil at a premium of $2 per barrel for March 1, 20X2. The options are at the money of $30 per barrel; therefore, the entire$20,000 is time value.

b. Adjusting entry on December 31, 20X1:
December 31, 20X1

Loss on Hedge Activity	14,000	
Purchased Call Options		14,000

Record the decrease in the time value of the options to current earnings.

Purchased Call Options	10,000	
Other Comprehensive Income		10,000

Record the increase in the intrinsic value of the options to other comprehensive income.

c. Entries to record March 1, 20X2, expiration of options, the sale of the options, and the purchase of oil:

March 1, 20X2

Loss on Hedge Activity	6,000	
Purchased Call Options		6,000

Record the decrease in the time value of the options to current earnings. The options have expired.

Purchased Call Options	20,000	
Other Comprehensive Income		20,000

Record the increase in the intrinsic value of the options to other comprehensive income.

Cash	30,000	
Purchased Call Options		30,000

Record the sale of the call options.

Oil Inventory	330,000	
Cash		330,000

Record the purchase of 10,000 barrels of oil at the spot price of $33 per barrel.

P11-28B (continued)

d. June 1, 20X2, entries to record the sale of the oil and other entries:

June 1, 20X2

Cash	340,000	
Sales		340,000

Record the sale of 10,000 barrels of oil at $34 per barrel.

Cost of Goods Sold	330,000	
Oil Inventory		330,000

Recognize the cost of the oil sold.

Other Comprehensive Income – Reclassification	30,000	
Cost of Goods Sold		30,000

Reclassify into earnings the other comprehensive income from the cash flow hedge.

P11-29B A Fair Value Hedge: Use of an Option to Hedge Available-for-Sale Securities.

a. November 3, 20X2, entries:

November 3, 20X2

Available-for-Sale Securities	1,200	
Cash		1,200

Purchase 100 shares of JRS at $12 per share.

Put Option	100	
Cash		100

Purchase put options for 100 shares of JRS at $12 per share at a cost of $100.

b. December 31, 20X2, entries to record revaluations of stock and options:

December 31, 20X2

Put Option	100	
Gain on Hedge Activity		100

Record increase in intrinsic value of put options to current earnings

Loss on Hedge Activity	100	
Available-for-Sale Securities		100

Record decrease in fair value of hedged available-for-sale securities to current earnings, in accordance with **ASC 815**:
$100 = ($12 - $11) x 100 shares

Loss on Hedge Activity	60	
Put Option		60

Record decrease in the time value of the options.

c. Entries for March 3, 20X3, to record exercise of the put option and the sale of securities:

March 3, 20X3

Put Option	50	
Gain on Hedge Activity		50

Record increase in intrinsic value of put options to current earnings

Loss on Hedge Activity	50	
Available-for-Sale Securities		50

Record decrease in fair value of hedged available-for-sale securities to current earnings, in accordance with **ASC 815**:
$50 = ($11 - $10.50) x 100 shares

P11-29B (continued)

Loss on Hedge Activity	40	
Put Option		40

Record decrease in the time value of the options. The options have now expired.

Cash	1,200	
Put Option		150
Available-for-Sale Securities		1,050

Exercise the put option and sell securities at option price of $12 per share.

P11-30B Matching Key Terms – Hedging and Derivatives

1. L
2. E
3. M
4. D
5. G
6. I
7. A
8. K
9. H
10. N
11. F
12. B
13. J
14. O
15. C

P11-31 Determining Financial Statement Amounts

	Transaction			
	1	2	3	4
Forward Contract Receivable	$20,200	$20,200	$20,200	$20,200
Inventory	19,800	21,000	21,000	NA
Accounts Payable	19,600	19,600	19,600	NA
Foreign Currency Exchange Gain (Loss), net	1,000 G	NA	1,000 G	800 G
Other Comprehensive Income Gain (Loss), net	NA	2,200 G	NA	NA

Computational support:
Forward Contract Receivable: $20,200 = €20,000 x $1.01 12/31 forward rate

Inventory: $19,800 = $21,000 accounts payable less $1,200 firm commitment
$21,000 = €20,000 x $1.05 11/30 spot rate

Accounts Payable: $19,600 = €20,000 x $0.98 12/31 spot rate

Foreign Currency Exchange Gain or (Loss), net:

Transaction 1: $1,000 =
- $ 1,200 exchange gain on forward contract from change in forward rate from 9/1 to 11/30: (€20,000 x ($1.03 -$0.97))
- \- 1,200 exchange loss on firm commitment for change in forward rate from 9/1 to 11/30: (€20,000 x ($1.03 -$0.97))
- \- 400 exchange loss on forward contract from change in forward rate from 11/30 to 12/31: (€20,000 x ($1.01 -$1.03))
- \+ 1,400 exchange gain on account payable for change in spot rate from 11/30 to 12/31: (€20,000 x ($0.98 -$1.05))

Transaction 2: No net foreign currency exchange gain because **ASC 815** specifies an offset of the gain from the revaluation of the account payable by an equal amount from other comprehensive income.

P11-31 (continued)

Transaction 3: $1,000 = $1,400 exchange gain on account payable from change in spot rate from 11/30 to 12/31: (€20,000 x ($0.98 -$1.05))
\- 400 exchange loss on forward contract from change in forward rate from 9/1 to 12/31: (€20,000 x ($1.01 -$1.03))

Transaction 4: $ 800 = exchange gain on forward contract from change in forward rate from 9/1 to 12/31: (€20,000 x ($1.01 -$0.97))

Other Comprehensive Income Gain or (Loss), net:
Transaction 2: $2,200 = $ 800 OCI gain on forward contract from change in forward rate from 9/1 to 12/31: (€20,000 x ($1.01 -$0.97))
\+ 1,400 OCI gain on the reclassification from OCI to offset the exchange gain on the account payable from the change in the spot rate from 11/30 to 12/31, as required by **ASC 815**: (€20,000 x ($0.98 -$1.05))