16 If national consumption is \$9 billion when income is 0\$, and if the marginal propensity to consume is 0.30, what is consumption when dispusable income is \$20 billion?

marginal propensity = 0.3

∴ Consumption function $C(y) = \int 0.3\,dy$

$= 0.3y + C$

to find C: $C(0) = 9$ billion معطى بالسؤال

∴ $9 = 0.3(0) + C \longrightarrow \boxed{9 = C}$

$\longrightarrow \boxed{C(y) = 0.3y + 9}$ billion

18 If consumption is \$5 billion when disposable income is 0\$, and if the marginal probensity to consume is $\frac{dC}{dy} = 0.4 + \frac{0.3}{\sqrt{y}}$,

find the national consumption function.

$$C(y) = \int \left(0.4 + \frac{0.3}{\sqrt{y}}\right) dy$$

(⟹)