جامعة بيرزيت
BIRZEIT UNIVERSITY

Mathematics Department

Math 1431

Name: [redacted] Number: [redacted] Section: _____

Quiz:

1. Solve the following inequality:

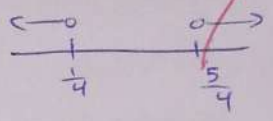
$$|3-4x|>2$$

either $3-4x>2$ or $3-4x<-2$

$-3 \quad -3$ $\quad$ $-3 \quad -3$

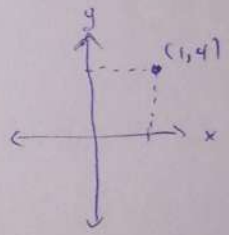
$\div -4(-4x>-1)$ $\quad$ $\div -4(-4x<-5)$

$x<\frac{1}{4}$ $\quad$ $x>\frac{5}{4}$



SS: $\mathbb{R}\setminus[\frac{1}{4},\frac{5}{4}]$

2. Find the equation of the line passes through $(1,4)$ and perpendicular to the line $2y-5x+7=0$



$2y-5x+7$

$2y=5x-7$

$y=\frac{5x}{2}-\frac{7}{2}$

$m_1=\frac{5}{2}$

$m_1 \times m_2=-1$

$\frac{5}{2}\times m_2=-1$

$\frac{-2}{5}=m_2$

$(y-y_0)=m(x-x_0)$

$(y-4)=\frac{-2}{5}(x-1)$

$y-4=\frac{-2}{5}x+\frac{2}{5}$

$y=\frac{-2}{5}x+\frac{2}{5}+\frac{4\times 5}{1\times 5}$

$y=\frac{-2}{5}x+\frac{22}{5}$