

due Tuesday 8/27

$$1. a) m = \frac{-3-11}{6--5} = \frac{-14}{11}$$

$$m = \frac{-14}{11}$$

b) slope of given line: $\frac{4}{7}$

$\perp m: -\frac{7}{4}$

$y = -\frac{7}{4}(x-11) + 5$

point-slope form

$$\left\{ \begin{aligned} y &= -\frac{14}{11}(x-6) - 3 \text{ OR} \\ y &= -\frac{14}{11}(x+5) + 11 \text{ OR} \end{aligned} \right.$$

$y = -\frac{14}{11}x + \dots \text{ OR } \frac{51}{11}$

slope-intercept form

$$14x + 11y = \dots 51 \text{ standard form}$$

2. a) $m = 4$
 $(0, -3)$

b) $m = -\frac{3}{4}$
 $(-2, 5)$

c) $m = \frac{3}{4}$
 $(0, -\frac{2}{4})$

d) $m = 0$
 $(\text{any } x \text{ value}, 5)$

e) slope undefined
 $(-12, \text{any } y \text{ value})$

3. mdpt is ave between 2 pts \therefore

$$\left(\frac{-2+1}{2}, \frac{7+-5}{2} \right) \rightarrow \left(-\frac{1}{2}, 1 \right)$$

4. $(-4, 11)$

