9T3-16 Number ____ Name _____ Period _____ Score _____

For each linear equation <u>write the slope</u> of a line parallel to the given line.

1. $y = -3x + 5$ 2. $y = 7x - 3$ 3. $3x - 2y = 8$

m = _____ m = _____ m = _____

For **each linear equation <u>write the slope</u> of a line perpendicular to the given line.**

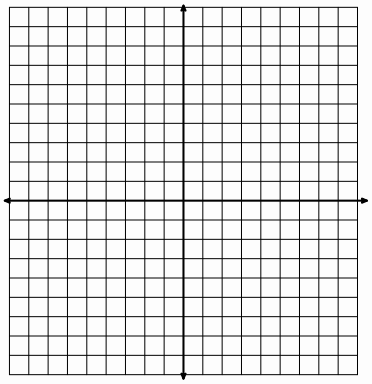
4. $y = -\frac{2}{7}x + 5$ 5. $y = \frac{1}{5}x - 4$ 6. $3x + 5y = -15$

m = _____ m = _____ m = _____

Find the *slope* between each pair of points. Then, using the Pythagorean Theorem, find the *distance* between each pair of points. You may use the graph to help you as needed.

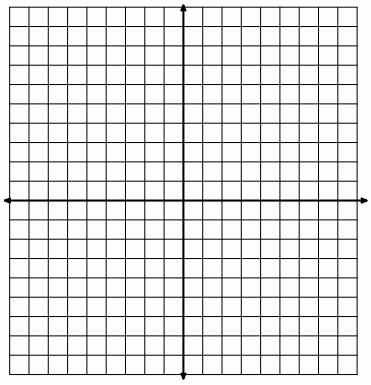
7. (-2, -3) (1, 1)
a. Slope: b. Distance:

8. (-7, 5) (-2, -7)
a. Slope: b. Distance:



9. Graph the system of linear inequalities

$$\begin{cases} y > 4x - 2 \\ y \leq -\frac{2}{3}x + 5 \end{cases}$$



10. Draw a graph that has a domain of [-2, 5].