

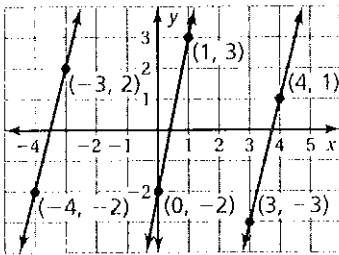
Name: \_\_\_\_\_ Date: \_\_\_\_\_

Chapter 2, Section 2B Notes  
*Slopes of Parallel and Perpendicular Lines*

**Today's Learning Goal:** *At the end of today's lesson, you should be able to find the slope of parallel and perpendicular lines.*

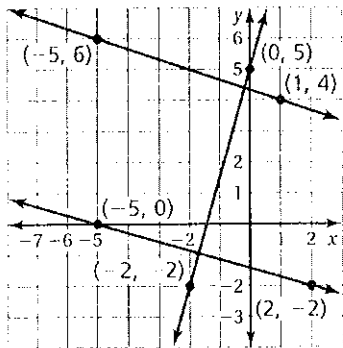
Two lines are parallel if \_\_\_\_\_.

Example: Determine which lines are parallel. Explain how you know.



Two lines are perpendicular if \_\_\_\_\_.

Example: Determine which lines are perpendicular. Explain how you know.



More Examples:

Are the given lines parallel? Explain your reasoning.

a)  $y = -5$ ,  $y = 3$

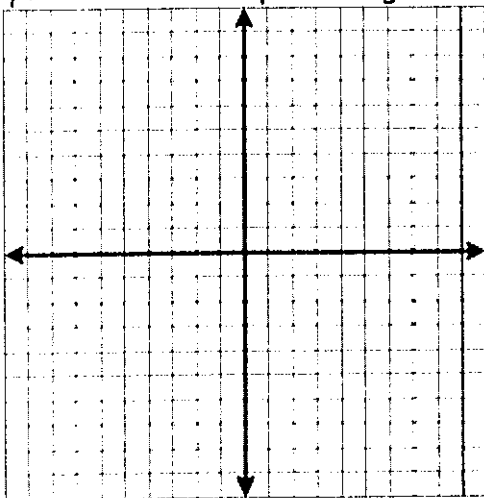
b)  $y = 0$ ,  $x = 0$

Are the given lines perpendicular? Explain your reasoning.

a)  $x = -2$ ,  $y = 8$

b)  $x = -8$ ,  $x = 7$

The vertices of a quadrilateral are  $A(-5, 3)$   $B(2, 2)$   $C(4, -3)$   $D(-2, -2)$ . Determine whether the quadrilateral is a parallelogram.



**Progress Monitoring:** How do you feel about your level of understanding of finding slope of parallel and perpendicular lines? (Rate yourself from 0 (don't understand at all) to 10 (doing awesome))

