

**LESSON** **Technology Lab Recording Sheet** p. 356

**5-9 Families of Linear Functions**

**Try This**

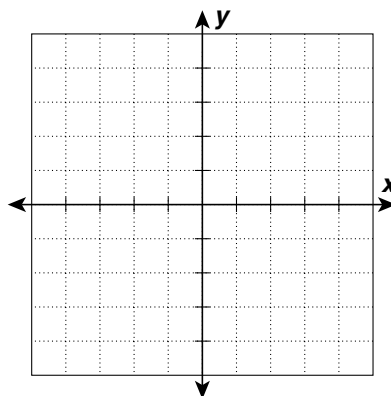
1. Make a prediction about the lines described by  $y = 2x - 3$ ,  $y = 2x - 2$ ,  $y = 2x - 1$ ,  $y = 2x$ ,  $y = 2x + 1$ ,  $y = 2x + 2$ , and  $y = 2x + 3$ . Then graph.

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Was your prediction correct?

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2. Now explore what happens when you change the value of  $m$  in  $y = mx$ .

- a. Make a Prediction** How do you think the lines described by  $y = -2x$ ,  $y = -x$ ,  $y = x$ , and  $y = 2x$  will be related?

How will they be alike?

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How will they be different?

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- b.** Graph the functions given in part **a**.

Was your prediction correct?

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- c.** How is the effect of  $m$  different when  $m$  is positive from when  $m$  is negative?

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