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**2-41.** If :

* 1. What is the slope of the line?
	2. What is the *y*‑intercept of the line?
	3. Graph the line.

**2-42.** Without graphing, find the slope of each line described below

1. A line that goes through the points (4, 1) and (2, 5).
2. A line that goes through the origin and the point (10, 5).
3. A vertical line (one that travels “up and down”) that goes through the point (6, −5).
4. A line that goes through the points (1, 6) and (10, 6).

**2-43.** Ms. Cai’s class is studying a tile pattern.  The rule for the tile pattern is

*y* = 10*x* − 18. Kalil thinks that Figure 12 of this pattern will have 108 tiles.  Is he correct? Justify your answer.

**2-44.** State the slope and *y*‑intercept of each line.

 Slope y-intercept

1. 
2. 
3. 

**2-45.** Evaluate the expressions below for the given values.

a. −*x*2 + 3*x*  for *x*= −3 b. 5− (*x −*2)2for*x*= −1

c.  d. 