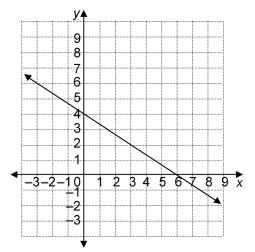
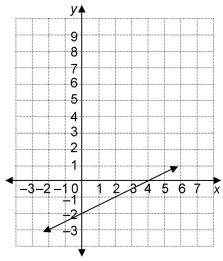
Practice: Connecting Variation, Slope, and First Differences

1. Look at this graph of a relation.



- a) Calculate the slope.
- **b)** Determine the vertical intercept.
- c) Write an equation for the relation of the form y = mx + b.
- 2. Look at this graph of a relation.



- a) Calculate the slope.
- b) Determine the vertical intercept.
- c) Write an equation for the relation.
- 3. A relation is represented by the equation y = 3x 5.
 - a) Is this relation a direct variation or a partial variation?

- **b)** Identify the initial value of y.
- c) Identify the constant of variation.
- **d)** Make a table of values for *x*-values from 0 to 4.
- e) Graph the relation.
- **4.** The table represents a relation.

X	y
0	-1
1	3
2	7
3	11
4	15
5	19

- a) Use a graph to represent the relation.
- **b)** Use words to represent the relation.
- c) Identify the vertical intercept and the slope. Write an equation to represent the relation.
- **5.** A large cheese pizza costs \$8.00, plus \$0.50 for each topping.
 - a) Make a table to represent the relation.
 - **b)** Graph the relation.
 - c) Write an equation to represent the relation.
- **6.** Represent this relation using words, with numbers, and with an equation.

