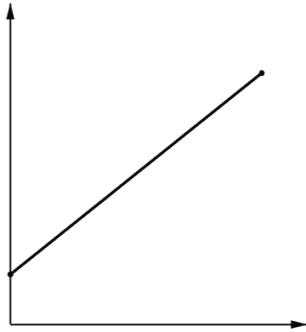
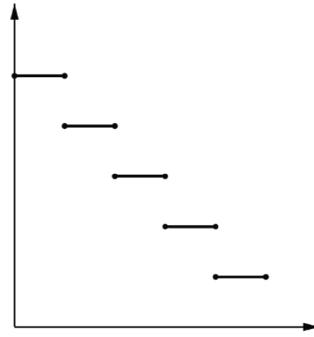


Lesson 6 Practice Problems

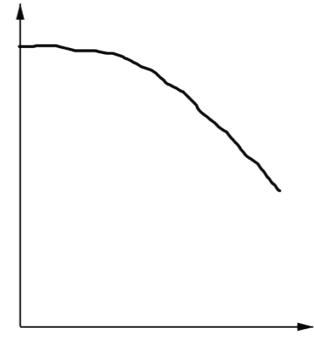
1. Match the graph to the following situations (you can use a graph multiple times). For each match, name possible independent and dependent variables and how you would label the axes.



A



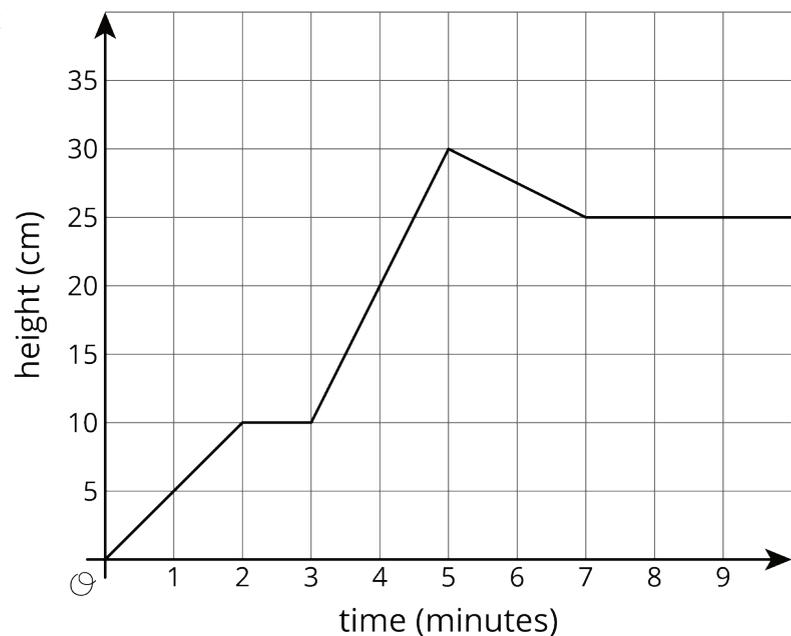
B



C

- Tyler pours the same amount of milk from a bottle every morning.
 - A plant grows the same amount every week.
 - The day started very warm but then it got colder.
 - A carnival has an entry fee of \$5 and tickets for rides cost \$1 each.
2. Jada fills her aquarium with water.

The graph shows the height of the water, in cm, in the aquarium as a function of time in minutes. Invent a story of how Jada fills the aquarium that fits the graph.



3. Recall the formula for area of a circle.

- a. Write an equation relating a circle's radius, r , and area, A .
- b. Is area a function of the radius? Is radius a function of the area?
- c. Fill in the missing parts of the table.

r	3		$\frac{1}{2}$	
A		16π		100π

(From Unit 5, Lesson 4.)

4. The points with coordinates $(4, 8)$, $(2, 10)$, and $(5, 7)$ all lie on the line $2x + 2y = 24$.

- a. Create a graph, plot the points, and sketch the line.
- b. What is the slope of the line you graphed?
- c. What does this slope tell you about the relationship between lengths and widths of rectangles with perimeter 24?



(From Unit 3, Lesson 11.)