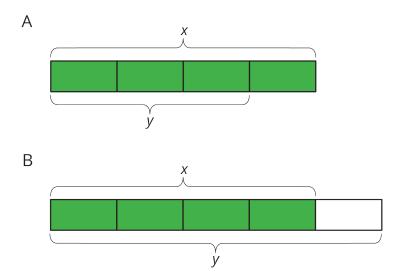


Lesson 6 Practice Problems

1. For each diagram, decide if y is an increase or a decrease relative to x. Then determine the percent increase or decrease.



- 2. Draw diagrams to represent the following situations.
 - a. The amount of flour that the bakery used this month was a 50% increase relative to last month.

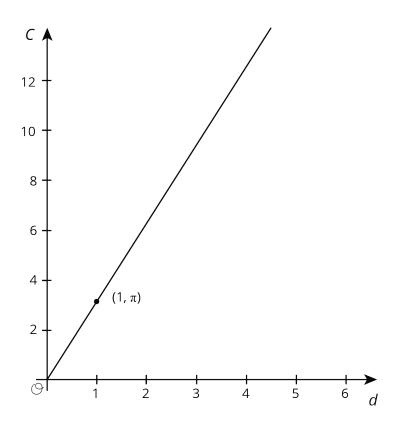
b. The amount of milk that the bakery used this month was a 75% decrease relative to last month.



- 3. Write each percent increase or decrease as a percentage of the initial amount. The first one is done for you.
 - a. This year, there was 40% more snow than last year.

The amount of snow this year is 140% of the amount of snow last year.

- b. This year, there were 25% fewer sunny days than last year.
- c. Compared to last month, there was a 50% increase in the number of houses sold this month.
- d. The runner's time to complete the marathon was a 10% less than the time to complete the last marathon.
- 4. The graph shows the relationship between the diameter and the circumference of a circle with the point $(1, \pi)$ shown. Find 3 more points that are on the line.



(From Unit 3, Lesson 3.)



- 5. Priya bought x grams of flour. Clare bought $\frac{3}{8}$ more than that. Select **all** equations that represent the relationship between the amount of flour that Priya bought, x, and the amount of flour that Clare bought, y.
 - A. $y = \frac{3}{8}x$
 - B. $y = \frac{5}{8}x$
 - C. $y = x + \frac{3}{8}x$
 - D. $y = x \frac{3}{8}x$
 - E. $y = \frac{11}{8}x$

(From Unit 4, Lesson 4.)