# Lesson 3 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.

A
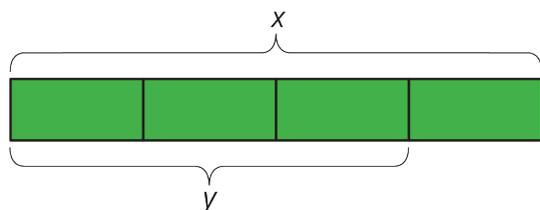
B
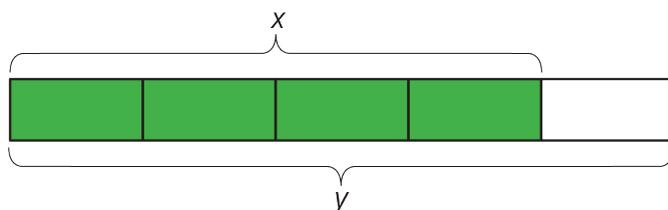
2. Draw diagrams to represent the following situations.

   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 5, Lesson 12.)

Accelerated 6 Unit 6

Lesson 3

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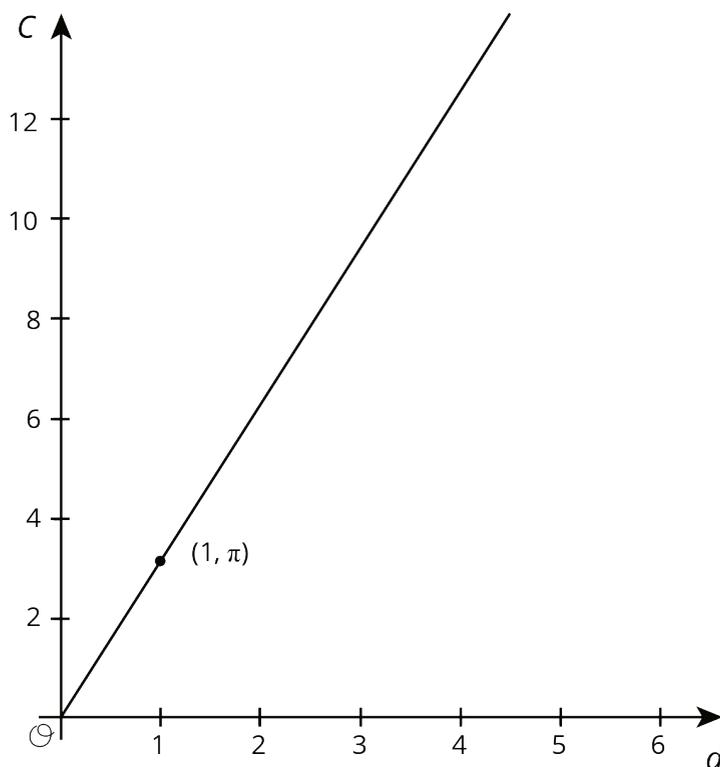
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5. Priya bought x grams of flour. Clare bought $\frac{3}{8}$ more than that. Select **all** equations that represent the relationship between the amount of flour that Priya bought, x, and the amount of flour that Clare bought, y.

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 6, Lesson 1.)

Accelerated 6 Unit 6
Lesson 3

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