## 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.)

