6.5: Percents of Increase and Decrease

Write the decimal as a percent.

1. 0.45 2. 1.34 3. 0.549

4. 1.08 5. 0.985 6. 0.3225

Find the new amount.

1. 15 inches increased by 20%

2. 145 gallons decreased by 60%

3. 70 meters increased by 80%

4. 150 grams decreased by 74%

5. 120 pounds decreased 5%

6. 40 liters increased by 25%

Find the new amount.

1. 12 dogs decreased by 25%
2. 140 fluid ounces increased by 45%
3. 100 textbooks increased by 99%
4. 75 students decreased by 80%

Identify the percent of change as an *increase* or a *decrease*. Then find the percent of change. Round to the nearest tenth of a percent, if necessary.

5. 5 cups to 8 cups

6. 150 pounds to 135 pounds

7. 14 dollars to 10 dollars

8. 28 seconds to 23 seconds

9.  to 

10.  to 

11. Yesterday your bus ride to school took 10 minutes. Today your bus ride took 12 minutes. What is the percent of change?

12. Yesterday 270 concert tickets were sold. Today 216 tickets were sold.

a. Find the percent of change in the number of tickets sold from yesterday to today.

b. Use the percent of change from part (a) to predict the number of tickets sold tomorrow. Round to the nearest ticket, if necessary.

c. Find the predicted percent of change in the number of tickets sold   
from yesterday to tomorrow. Round to the nearest tenth of a percent,   
if necessary.

13. This month a band has 6 musicians. This is a 50% increase from the number of musicians in the band last month. How many musicians were   
in the band last month?

14. The sides of a square garden are 8 feet long.

a. You enlarge the garden to create a 25% increase in the length of each side. Find the new length of the sides.

b. Find the percent of change in the perimeter of the garden. Round to   
the nearest tenth of a percent, if necessary.

c. Find the percent of change in the area of the garden. Round to the nearest tenth of a percent, if necessary.