

Lesson 5.3: Solving Percent Problems

1. Find the number in each case.
 - a) 30% of a number is 12.
 - b) 2% of a number is 9.
 - c) 150% of a number is 60.
 - d) 55% of a number is 11.

2. Find the whole amount in each case.
 - a) 8% is 72 cm.
 - b) 0.6% is 18 g.
 - c) 120% is 24 m.
 - d) 32% is 64 mL.

3. Write each increase as a percent.
 - a) The price of gasoline increased from 93.9¢ to 99.9¢.
 - b) The price of a car increased from \$32 000 to \$36 000.
 - c) The price of a loaf of bread increased from \$1.99 to \$2.49.

4. Write each decrease as a percent.
 - a) The number of employees decreased from 6800 to 5200.
 - b) The area of a park decreased from 840 ha to 672 ha.
 - c) The price of a computer decreased from \$1500 to \$1200.

5. A printing machine produces labels.
Four percent of the labels produced are defective.
Suppose 372 labels were defective.
How many labels are not defective?

6. A field goal kicker was successful 75% of the time.
He made 51 field goals.
How many kicks did he make in total?

7. Lesley and Enid left their waitress a 15% tip.
The tip was \$10.25.
What was their total bill, not including the tip?

8. Marcus collects baseball cards. At the end of 2005, he had 250 cards.
His collection increased by 12% in 2006, and by 15% in 2007.
 - a) How many baseball cards did Marcus have at the end of 2007?
 - b) Is your answer to part a the same as a 27% increase in the number of cards Marcus had at the end of 2005? Why or why not?