

# Algebra I

## 4.5 Warm-Up #4

### Solving Problems with Percents

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_ HOUR: \_\_\_\_\_

**Read each question and circle the best answer.**

1. Approximately 67% of your body weight is water. If your weight were 125 pounds, how many pounds would be water?

- A 58.0 lbs
- B 67.5 lbs
- C 83.75 lbs
- D 87.36 lbs

2. In the United States, about 46% of the population wears contact lenses or glasses. About how many students in a school of 1200 would you expect to wear glasses or contact lenses, based on this data?

- F 425
- G 500
- H 552
- I 1000

3. Angela spends 25% of her day in school. How many hours does Angela spend in school each day? Use a 24-hour day.

- A 9 h
- B 8 h
- C 7 h
- D 6 h

4. The baseball team that is currently in first place has won 75% of their 28 games this year. How many games have they won?

- F 20
- G 21
- H 25
- I 26

5. About 40% of children and teenagers bite their nails. A school district has an enrollment of 16,880 students. Based on this data, about how many students are probably nail-biters?

- A 10,128
- B 1012.8
- C 6752
- D 675.2

6. The weatherman reports that there is a 12% decrease in the average temperature from summer to fall. The average temperature during the summer was 95 degrees. By how much will the average temperature decrease in the fall?

- F 12.0°
- G 11.4°
- H 1.20°
- I 1.14°

**Solve each problem.**

7. Mr. Hamilton is planning a graduation party for 60 soccer players. He will be serving soft drinks and cookies. If 85% of the players have said they will be coming to the party, how many soft drinks should Mr. Hamilton order?

for one  
per person  
for one  
per person

8. If each player coming to Mr. Hamilton's party brings a guest, how many soft drinks should Mr. Hamilton order?

9. 84% of  $n = 126$ ;  $n =$  \_\_\_\_\_

10. 12% of  $n = 9$ ;  $n =$  \_\_\_\_\_

11. 30% of  $n = 45$ ;  $n =$  \_\_\_\_\_

12. 90% of  $n = 27$ ;  $n =$  \_\_\_\_\_

Read each question and circle the best answer.

1. Only 5% of the stores in the mall will not have a "Back to School" sale. If there are 80 stores in the mall, how many stores will have a "Back to School" sale?  
A 4  
B 40  
C 76  
D 78
2. What percent of 8 is 12?  
F 66%  
G 67%  
H 75%  
I 150%
3. Seventy-five percent of the 800 students at Thomas Jefferson High School voted for Band B to play at the end-of-the-year school dance. How many students voted for Band B?  
A 600  
B 625  
C 650  
D 700
4. How many students voted for a band other than Band B?  
F 100  
G 150  
H 175  
I 200
5. 10% of what number is 6?  
A 6  
B 10  
C 60  
D 600
6. Four out of 16 students completed the math test early. What percent of the students is this?  
F 16%  
G 25%  
H 40%  
I 50%
7. 24% of what number is 48?  
A 24  
B 48  
C 200  
D 248
8. What percent of 20 is 14?  
F 20%  
G 70%  
H 80%  
I 90%
9. What number is 75% of 40?  
A 30  
B 40  
C 75  
D 300
10. Gene ate 6 out of 8 slices of pizza. What percent of the pizza did Gene eat? \_\_\_\_\_

**Compute.**

11. What is 20% of 35? \_\_\_\_\_
12. What is 35% of 60? \_\_\_\_\_
13. What is 10% of 90? \_\_\_\_\_
14. What is 200% of 17? \_\_\_\_\_
15. What is 50% of 186? \_\_\_\_\_
16. What is 60% of 95? \_\_\_\_\_
17. What is 5% of 800? \_\_\_\_\_
18. What is 12% of 7300? \_\_\_\_\_