## Unit Assessment

## Ratio, Proportion, and Percent

DIRECTIONS: Complete your work on a separate sheet. Write each answer in the space provided.
Directions for Problems 1-4: Express each fraction or decimal as a percent.

1. $\frac{3}{200}$
2. $\frac{7}{8}$
3. 3.07
4. Which percent is equivalent to 0.335 ? (Choose the correct answer.)
A. $3.35 \%$
B. $33 \%$
C. $33.5 \%$
D. $3 \frac{1}{3} \%$

Directions for Problem 5: Express the percent as a proper fraction in lowest terms and as a decimal.
5. $8 \%$
6. Mario's salary increased from $\$ 75$ per week to $\$ 93$ per week. What is the percent of increase?
7. Mary Karp bought a car for $\$ 8200$. By the end of the year, the value of the car had decreased by \$2706. By what percent had the car decreased in value?
8. A salesman receives an $8 \%$ commission on shirt sales. If he earned $\$ 11.38$ in commissions, what was the total

Answers

1. $\qquad$
2. $\qquad$
3. $307 \%$
4. $\qquad$
5. $2 / 25, .08$
6. $\qquad$
7. $\qquad$
$\qquad$
8. $142.25 \%$
9. $\$ 11,808$
10. $n=32$
11. $x=54$
12. D $\qquad$

Directions for Problems 10-12: Solve each proportion.
10. $\frac{8}{n}=\frac{15}{60}$
11. $\frac{18}{1.5}=\frac{x}{4.5}$
12. $\frac{30}{x}=\frac{10}{24}$ (Choose the correct answer.)
A. 216
B. 720
C. 7.2
D. 72

## Unit Assessment

Directions for Problems 13-14: Replace ? with <, >, or = to make a true statement.
13. 5.3 ? $53 \%$
14. $\frac{3}{5}$ ? $60 \%$

## Answers

13. $\qquad$
14. $\qquad$
15. If Marie deposits $\$ 320$ in a bank account at $5 \frac{1}{4} \%$ per year, how much simple interest will she earn after 2 years?

Answer: Marie will earn $\$ 33.60$ in simple interest.
16. Victor opens a savings account with $\$ 600$. The account pays $5 \frac{1}{2} \%$ interest, compounded quarterly. If he makes no other deposits or withdrawals, how much will Victor have in his account after 9 months?

Answer: Victor will earn $\$ 625.09$ after nine monthsy
17. Jack Stanford deposited $\$ 280$ in a Holiday Club savings account, which pays $6 \frac{1}{2} \%$ interest, compounded semiannually. If Jack makes no additional deposits, how much will be in his account at the end of a year?

Answer: Jarwill have $\$ 298.50$ in his account at the end of the year.
18. A scale drawing of a room uses the scale 1 in .: 20 ft . Find the actual length of the room if it measures $1 \frac{1}{4} \mathrm{in}$. in the scale drawing.

Answer: $\qquad$

## Unit Assessment

19. A map uses the scale $1 \mathrm{~cm}: 20 \mathrm{~km}$. If the distance between two cities is 170 km , what is the distance on the map?

Answer: The distance on the map will be 8.5 cm .
20. A $6 \frac{1}{2}$-ounce can of Sea View Tuna costs $91 \%$. Three 2 -pound cans of Ocean Blue Tuna cost $\$ 11.52$. Based on unit price alone, which brand is the better buy?

Answer: Ocean Blue Tuna is $\$ .02$ cheaper per ounce, so it is the better buy.
21. A train travels 120 mi in $1 \frac{1}{3} \mathrm{~h}$. How many miles will the train go in 6 h traveling at the same rate?

Answer: The train will go 540 miles


