

 Module Test **B** **Module 7** 

Write each ratio as a percent.

1.  $\frac{16}{5}$

2. 5 : 2

3. 7 to 500

Answer each of the following.

4. 85% of what number is 34?

5. What is 800% of 7?

6. What percent of 200 is 170?

Fill in the blanks with one of the following words:

markup    discount    simple    compound    part    whole    percent

7. A \_\_\_\_\_ is an amount added to the cost of an item.

8. The unknown number is the \_\_\_\_\_ when using the percent proportion to answer “60% of what number is 150?”

9. \_\_\_\_\_ interest is paid on principal only.

10. The number 6 is the \_\_\_\_\_ when using the percent proportion to answer “What percent of 8 is 6?”

Circle the correct answer for each problem.

11. Evaluate:  $\sqrt{64} + 5^2 + \sqrt{16}$

- a. 22                      b. 33                      c. 37                      d. 49

12. Evaluate:  $\sqrt{36} + \sqrt{81} + 5^2$

- a. 24                      b. 40                      c. 20                      d. 25

13. Which number is not a perfect square number?

- a. 100                      b. 121                      c. 25                      d. 75

14. Which ratios are in proportion?

- a.  $\frac{3}{18} = \frac{2}{9}$                       b.  $\frac{8}{6} = \frac{16}{12}$                       c.  $\frac{3}{4} = \frac{5}{6}$                       d.  $\frac{8}{9} = \frac{2}{3}$

15. Which is a unit rate?

- a.  $\frac{1 \text{ girl}}{6 \text{ boys}}$                       b.  $\frac{8 \text{ pounds}}{5 \text{ boxes}}$                       c.  $\frac{20 \text{ books}}{3 \text{ shelves}}$                       d.  $\frac{4 \text{ people}}{1 \text{ car}}$

NAME \_\_\_\_\_

DATE \_\_\_\_\_

16. It costs Debbie \$5.50 to knit a scarf. How much will she sell her scarves for if her markup is 160%?
17. Paula's waffle recipe calls for five tablespoons of sugar for every two tablespoons of salt. How many tablespoons of sugar should she use if she uses three tablespoons of salt?
18. Larry saved \$6,000 for  $2\frac{3}{4}$  years at a rate of 4%. Find the amount of simple interest earned and the total amount in the account.
19. Mr. Nunez saved \$3,000 at a rate of 6.5% compounded semiannually. Find the total amount after  $1\frac{1}{2}$  years.

**Answer the following questions.**

**20.** Explain how to find the perimeter of a square if its area is 49 square feet.

**21.** Jack is building picture frames at a rate of seven frames every two hours. Paul is building picture frames at a rate of 10 frames every three hours. Complete the table and explain how to use it to find who builds picture frames at a faster rate. Then explain how to use unit rates to find who builds picture frames at a faster rate.

<b>Jack</b>	
<b>frames</b>	<b>hours</b>

<b>Paul</b>	
<b>frames</b>	<b>hours</b>