

Finding a Percentage

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Finding a Percentage Finding a percentage means finding a percent of a number. To find a percent of a number, change the percent to a decimal and then multiply it by the number.

EXAMPLE 1

What number is 20% of 95?

Write it out as an equation.

Let n stand for the unknown number.

$n = 20\% \times 95$ (In mathematics, *of* means “times” and *is* means “equals.”)

$n = 0.20 \times 95$ (Change the percent to a decimal. Multiply.)

$n = 19$

Write the answer. **20% of 95 is 19.**

✓ Concept CHECK

Complete the problems. Check your answers in the back of the book. Find the percentage in Problems 1–4.

- | | |
|--------------|----------------|
| 1. 40% of 70 | 2. 25% of 120 |
| 3. 5% of 30 | 4. 145% of 200 |

EXAMPLE 2

The delivery charge is 7% of the selling price of \$140.00. Find the delivery charge.

Write it out as an equation.

Let n stand for the unknown number.

$n = 7\% \times \$140$

$n = 0.07 \times \$140$

$n = \$9.80$

The delivery charge is \$9.80.

EXAMPLE 3

A student had 85% correct out of 60 questions. How many answers were correct?

Write it out as an equation.

Let n stand for the unknown number.

$$n = 85\% \times 60$$

$$n = 0.85 \times 60$$

$$n = 51$$

There were 51 correct answers.

✓ Concept CHECK

Complete the problems. Check your answers in the back of the book.

5. The discount is 35% of the selling price of \$70. Find the discount.
6. Your share of the crop of beans is 60% of the total. Find your share if the total is 95 tons.

Practice

Find the percentage.

7. 20% of 54

8. 40% of 216

9. 42% of 335

10. 75% of 815

11. 32% of 315

12. 8% of 50

13. 4% of 95

14. 6% of 48

Round answers to the nearest cent.

15. 5.5% of \$60

16. 6% of \$70

17. 7.75% of \$30

18. 6.5% of \$420

19. 7.5% of \$160

20. 4.25% of \$470

21. 8.25% of \$76

22. 4.5% of \$36

23. When installing a sub-floor using 1-inch by 8-inch boards laid diagonally, 18% is allowed for waste. How many board feet will be wasted out of 1,350 board feet?
24. An electrical repair shop charges 37% of the cost of a new motor for rewinding the motor. If the motor costs \$375 new, how much would the rewinding cost be?