

# Finding the Whole from a Part and Percent

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Score: \_\_\_\_\_ / 18

## Quick Review and Helpful Hints

When a *part* is a known percent of a whole, find the whole by *dividing* the part by the percent (written as a decimal):  $\text{whole} = \text{part} \div \text{percent}$ . For example, if 25% is known, divide by 0.25.

► **Example:** 20 is 25% of what number? **Work:** Divide the part by the percent as a decimal:  $20 \div 0.25 = 80$ . **★ Answer:** 80

part      whole

$\text{whole} = \text{part} \div \text{percent}$ .

### ◆ Practice Problems

Find the whole.

- |                   |       |                   |       |
|-------------------|-------|-------------------|-------|
| 1. 20 is 25% of?  | _____ | 8. 5 is 5% of?    | _____ |
| 2. 10 is 50% of?  | _____ | 9. 40 is 80% of?  | _____ |
| 3. 15 is 10% of?  | _____ | 10. 3 is 10% of?  | _____ |
| 4. 6 is 20% of?   | _____ | 11. 18 is 60% of? | _____ |
| 5. 9 is 30% of?   | _____ | 12. 7 is 50% of?  | _____ |
| 6. 50 is 100% of? | _____ | 13. 25 is 50% of? | _____ |
| 7. 12 is 25% of?  | _____ | 14. 8 is 40% of?  | _____ |

### ◆ Word Problems

15. A tip of \$6 is 20% of the bill. Find the bill. \_\_\_\_\_
16. 30 students passed, which is 75% of the class. Find the class size. \_\_\_\_\_
17. \$12 is 25% of a price. Find the price. \_\_\_\_\_
18. 9 is 30% of what number? \_\_\_\_\_



## Answer Keys

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

16.

17.

18.

### Step-by-Step Explanations

1. Start by naming the process: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $20 \div 0.25 = 80$ . So the final answer is 80.

2. A good way to think about this is: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $10 \div 0.50 = 20$ . So the final answer is 20.

3. Step by step: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $15 \div 0.10 = 150$ . So the final answer is 150.

4. Take it one move at a time: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $6 \div 0.20 = 30$ . So the final answer is 30.

5. Start by naming the process: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $9 \div 0.30 = 30$ . So the final answer is 30.

6. A good way to think about this is: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $50 \div 1 = 50$ . So the final answer is 50.

7. Step by step: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $12 \div 0.25 = 48$ . So the final answer is 48.

8. Take it one move at a time: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $5 \div 0.05 = 100$ . So the final answer is 100.

9. Start by naming the process: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $40 \div 0.80 = 50$ . So the final answer is 50.

10. A good way to think about this is: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $3 \div 0.10 = 30$ . So the final answer is 30.

11. Step by step: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $18 \div 0.60 = 30$ . So the final answer is 30.

12. Take it one move at a time: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $7 \div 0.50 = 14$ . So the final answer is 14.

13. Start by naming the process: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $25 \div 0.50 = 50$ . So the final answer is 50.

14. A good way to think about this is: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $8 \div 0.40 = 20$ . So the final answer is 20.

15. Step by step: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $6 \div 0.20 = 30$ . So the final answer is 30.

16. Take it one move at a time: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $30 \div 0.75 = 40$ . So the final answer is 40.

17. Start by naming the process: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $12 \div 0.25 = 48$ . So the final answer is 48.

18. A good way to think about this is: When a part is a percent of a whole, change the percent to a decimal and divide the part by that decimal. The setup/work is  $9 \div 0.30 = 30$ . So the final answer is 30.



# Keep Building CHSPE Math Skills

Recommended Effortless Math resources



## The Most Comprehensive CHSPE Math Preparation Bundle

Use the complete CHSPE Math resource for review, worked examples, extra practice, and test-style questions after each worksheet.



Scan Me  
Download Instantly

## STUDENT FAVORITE - CHSPE Math Practice Workbook 2026



Step-by-step lessons, topic practice, and full review support for students who want a calm path through CHSPE Math preparation.

PDF Edition



Scan Me  
Download Instantly

A strong companion for self-study, tutoring, homework, and targeted review.

For more CHSPE Math prep, visit [EffortlessMath.com/CHSPE](https://www.EffortlessMath.com/CHSPE)