

# Converting Fractions, Decimals, and Percents

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

## Quick Review and Helpful Hints

To convert: *fraction* → *decimal*, divide; *decimal* → *percent*, multiply by 100 (move the point 2 right); *percent* → *decimal*, divide by 100 (move 2 left); *decimal* → *fraction*, write over a power of ten and simplify.

▶ **Example:** Write 0.6 as a percent. **Work:** Multiply by 100 (move the point two places right):  $0.6 \times 100 = 60$ . ★ **Answer:** 60%



Decimal → percent:  $\times 100$ .

### ◆ Practice Problems

Convert as directed.

- |   |  |
|---|--|
| <p>1. 0.5 as a percent _____</p> <p>2. 0.25 as a percent _____</p> <p>3. 0.6 as a percent _____</p> <p>4. 75% as a decimal _____</p> <p>5. 20% as a decimal _____</p> <p>6. <math>\frac{1}{2}</math> as a percent _____</p> <p>7. <math>\frac{1}{4}</math> as a percent _____</p> | <p>8. 0.05 as a percent _____</p> <p>9. 40% as a decimal _____</p> <p>10. <math>\frac{3}{5}</math> as a percent _____</p> <p>11. 0.9 as a percent _____</p> <p>12. 10% as a fraction _____</p> <p>13. <math>\frac{1}{5}</math> as a percent _____</p> <p>14. 100% as a decimal _____</p> |
|---|--|

### ◆ Word Problems

15. A test score is 0.8. Write it as a percent. \_\_\_\_\_
16. A 25% discount written as a decimal is what? \_\_\_\_\_
17. In a GED review group,  $\frac{1}{2}$  of the students choose extra fraction practice. What percent of the group is that? \_\_\_\_\_
18. A class budget uses 30% of its funds for printing packets. What fraction of the budget is that in simplest form? \_\_\_\_\_



## Answer Keys

- |                                      |                                       |                                       |
|--------------------------------------|---------------------------------------|---------------------------------------|
| 1. <input type="text" value="50%"/>  | 7. <input type="text" value="25%"/>   | 13. <input type="text" value="20%"/>  |
| 2. <input type="text" value="25%"/>  | 8. <input type="text" value="5%"/>    | 14. <input type="text" value="1"/>    |
| 3. <input type="text" value="60%"/>  | 9. <input type="text" value="0.4"/>   | 15. <input type="text" value="80%"/>  |
| 4. <input type="text" value="0.75"/> | 10. <input type="text" value="60%"/>  | 16. <input type="text" value="0.25"/> |
| 5. <input type="text" value="0.2"/>  | 11. <input type="text" value="90%"/>  | 17. <input type="text" value="50%"/>  |
| 6. <input type="text" value="50%"/>  | 12. <input type="text" value="1/10"/> | 18. <input type="text" value="3/10"/> |

### Step-by-Step Explanations

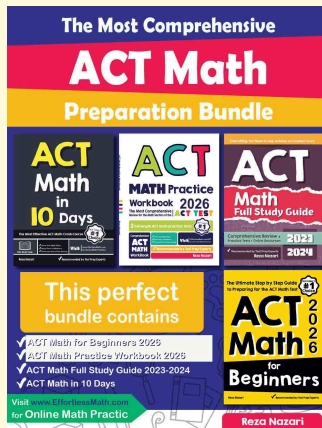
1. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $0.5 \times 100 = 50\%$ . So the final answer is 50%.
2. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $0.25 \times 100 = 25\%$ . So the final answer is 25%.
3. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $0.6 \times 100 = 60\%$ . So the final answer is 60%.
4. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $75 \div 100 = 0.75$ . So the final answer is 0.75.
5. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $20 \div 100 = 0.2$ . So the final answer is 0.2.
6. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $\frac{1}{2} = 0.5 = 50\%$ . So the final answer is 50%.
7. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $\frac{1}{4} = 0.25 = 25\%$ . So the final answer is 25%.
8. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $0.05 \times 100 = 5\%$ . So the final answer is 5%.
9. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $40 \div 100 = 0.4$ . So the final answer is 0.4.
10. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $\frac{3}{5} = 0.6 = 60\%$ . So the final answer is 60%.
11. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $0.9 \times 100 = 90\%$ . So the final answer is 90%.
12. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $10\% = \frac{10}{100} = \frac{1}{10}$ . So the final answer is  $\frac{1}{10}$ .
13. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $\frac{1}{5} = 0.2 = 20\%$ . So the final answer is 20%.
14. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $100 \div 100 = 1$ . So the final answer is 1.
15. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $0.8 \times 100 = 80\%$ . So the final answer is 80%.
16. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $25 \div 100 = 0.25$ . So the final answer is 0.25.
17. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $\frac{1}{2} = 50\%$ . So the final answer is 50%.
18. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is  $30\% = \frac{30}{100} = \frac{3}{10}$ . So the final answer is  $\frac{3}{10}$ .



# Keep Building ACT Math Skills

Recommended Effortless Math resources

## ACT Math Test Prep



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



Scan Me  
Download Instantly

## STUDENT FAVORITE - ACT Math in 30 Days



## ACT Math in 30 Days

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

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

PDF Edition



Scan Me  
Download Instantly

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