

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. $\frac{1}{2}$ as a percent _____</p> <p>7. $\frac{1}{4}$ as a percent _____</p> | <p>8. 0.05 as a percent _____</p> <p>9. 40% as a decimal _____</p> <p>10. $\frac{3}{5}$ as a percent _____</p> <p>11. 0.9 as a percent _____</p> <p>12. 10% as a fraction _____</p> <p>13. $\frac{1}{5}$ 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 $\frac{3}{10}$.



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