

Order of Operations Practice Worksheet

Name: _____ Date: _____ Period: _____

Instructions: Simplify each expression using the correct order of operations. Remember to follow the rules: Parentheses first, then Exponents, then Multiplication and Division (from left to right), and finally Addition and Subtraction (from left to right). Show all of your work clearly in the space provided. Write your final answer in the blank provided at the end of each problem.

1. $12 + 8 \div 4 \times 3$

_____ Final Answer

2. $(15 - 6) \times 2 + 7$

_____ Final Answer

3. $5^2 - 3 \times 4 + 6$

_____ Final Answer

4. $24 \div (8 - 2) + 3 \times 5$

_____ Final Answer

5. $7 + 2 \times (9 - 4)^2$

_____ Final Answer

6. $36 \div 6 \times 2 + 8 - 5$

_____ Final Answer

7. A bakery makes 4 batches of cookies. Each batch has 12 cookies. The bakery sells 3 boxes of cookies, and each box contains 8 cookies. Write an expression to represent the number of cookies left, then evaluate it using the order of operations.

_____ Final Answer

8. Sarah has \$50. She buys 3 notebooks that cost \$4 each and 2 pens that cost \$2 each. Write an expression to represent how much money Sarah has left, then evaluate it.

_____ Final Answer

9. $18 + 2 \times (10 - 6) \div 4$

_____ Final Answer

10. $4^3 \div 8 + 6 \times (3 + 1) - 5$

_____ Final Answer

Answer Key

$$\begin{aligned} 1. \quad & 12 + 8 \div 4 \times 3 \\ & = 12 + 2 \times 3 \\ & = 12 + 6 \\ & = \mathbf{18} \end{aligned}$$

$$\begin{aligned} 2. \quad & (15 - 6) \times 2 + 7 \\ & = 9 \times 2 + 7 \\ & = 18 + 7 \\ & = \mathbf{25} \end{aligned}$$

$$\begin{aligned} 3. \quad & 5^2 - 3 \times 4 + 6 \\ & = 25 - 12 + 6 \\ & = 13 + 6 \\ & = \mathbf{19} \end{aligned}$$

$$\begin{aligned} 4. \quad & 24 \div (8 - 2) + 3 \times 5 \\ & = 24 \div 6 + 15 \\ & = 4 + 15 \\ & = \mathbf{19} \end{aligned}$$

$$\begin{aligned} 5. \quad & 7 + 2 \times (9 - 4)^2 \\ & = 7 + 2 \times 5^2 \\ & = 7 + 2 \times 25 \\ & = 7 + 50 \\ & = \mathbf{57} \end{aligned}$$

$$\begin{aligned} 6. \quad & 36 \div 6 \times 2 + 8 - 5 \\ & = 6 \times 2 + 8 - 5 \\ & = 12 + 8 - 5 \\ & = 20 - 5 \\ & = \mathbf{15} \end{aligned}$$

$$\begin{aligned} 7. \quad & \text{Expression: } 4 \times 12 - 3 \times 8 \\ & = 48 - 24 \\ & = \mathbf{24 \text{ cookies left}} \end{aligned}$$

$$\begin{aligned} 8. \quad & \text{Expression: } 50 - (3 \times 4 + 2 \times 2) \\ & = 50 - (12 + 4) \\ & = 50 - 16 \\ & = \mathbf{\$34 \text{ left}} \end{aligned}$$

$$\begin{aligned} 9. \quad & 18 + 2 \times (10 - 6) \div 4 \\ & = 18 + 2 \times 4 \div 4 \\ & = 18 + 8 \div 4 \end{aligned}$$

$$\begin{aligned} &= 18 + 2 \\ &= \mathbf{20} \end{aligned}$$

$$\begin{aligned} 10. \quad &4^3 \div 8 + 6 \times (3 + 1) - 5 \\ &= 64 \div 8 + 6 \times 4 - 5 \\ &= 8 + 24 - 5 \\ &= 32 - 5 \\ &= \mathbf{27} \end{aligned}$$