

## Multiply and Divide Before You Add and Subtract

A-OPS 1

**Instructions:** Use the Order of Operations Rules to simplify each expression. Write your answer in the space provided and be sure to show your work.

Examples

$$5 + 2 \times 3 = \underline{11}$$

$$\begin{array}{r} 5 + 6 \\ 11 \end{array}$$

Multiply First

$$15 \div 5 - 1 = \underline{2}$$

$$\begin{array}{r} 3 - 1 \\ 2 \end{array}$$

Divide First

1  $6 + 4 \times 2 = \underline{14}$

$$\begin{array}{r} 6 + 8 \\ 14 \end{array}$$

2  $10 \times 4 - 5 = \underline{35}$

$$\begin{array}{r} 40 - 5 \\ 35 \end{array}$$

3  $10 - 6 \div 3 = \underline{8}$

$$\begin{array}{r} 10 - 2 \\ 8 \end{array}$$

4  $20 - 5 \times 4 = \underline{0}$

$$\begin{array}{r} 20 - 20 \\ 0 \end{array}$$

5  $3 \times 7 + 4 = \underline{25}$

$$\begin{array}{r} 21 + 4 \\ 25 \end{array}$$

6  $3 + 24 \div 8 = \underline{6}$

$$\begin{array}{r} 3 + 3 \\ 6 \end{array}$$

7  $8 + 4 \times 3 = \underline{20}$

$$\begin{array}{r} 8 + 12 \\ 20 \end{array}$$

8  $1 + 6 \times 5 = \underline{31}$

$$\begin{array}{r} 1 + 30 \\ 31 \end{array}$$

9  $12 \div 6 + 7 = \underline{9}$

$$\begin{array}{r} 2 + 7 \\ 9 \end{array}$$

10  $50 - 10 \div 2 = \underline{45}$

$$\begin{array}{r} 50 - 5 \\ 45 \end{array}$$

## Order of Operations: From Left To Right

A-OPS 2

**Instructions:** Use the Left To Right Rule to simplify each expression. Write your answer in the space provided and be sure to show your work.

$$\begin{array}{l} \text{1} \quad 6 - 4 + 8 = \underline{10} \\ \quad \quad 2 + 8 \\ \quad \quad 10 \end{array}$$

$$\begin{array}{l} \text{2} \quad 30 \div 3 \div 5 = \underline{2} \\ \quad \quad 10 \div 5 \\ \quad \quad 2 \end{array}$$

$$\begin{array}{l} \text{3} \quad 20 \div 5 \times 4 = \underline{16} \\ \quad \quad 4 \times 4 \\ \quad \quad 16 \end{array}$$

$$\begin{array}{l} \text{4} \quad 38 - 9 - 4 = \underline{25} \\ \quad \quad 29 - 4 \\ \quad \quad 25 \end{array}$$

$$\begin{array}{l} \text{5} \quad 12 - 5 + 3 = \underline{10} \\ \quad \quad 7 + 3 \\ \quad \quad 10 \end{array}$$

$$\begin{array}{l} \text{6} \quad 8 + 7 - 2 = \underline{13} \\ \quad \quad 15 - 2 \\ \quad \quad 13 \end{array}$$

$$\begin{array}{l} \text{7} \quad 24 \div 3 \div 2 \times 5 = \underline{20} \\ \quad \quad 8 \div 2 \times 5 \\ \quad \quad 4 \times 5 \\ \quad \quad 20 \end{array}$$

$$\begin{array}{l} \text{8} \quad 32 \div 4 \div 2 \times 4 = \underline{16} \\ \quad \quad 8 \div 2 \times 4 \\ \quad \quad 4 \times 4 \\ \quad \quad 16 \end{array}$$

$$\begin{array}{l} \text{9} \quad 4 \times 6 \div 2 \times 5 = \underline{60} \\ \quad \quad 24 \div 2 \times 5 \\ \quad \quad 12 \times 5 \\ \quad \quad 60 \end{array}$$

$$\begin{array}{l} \text{10} \quad 14 \div 2 \times 3 \div 3 = \underline{7} \\ \quad \quad 7 \times 3 \div 3 \\ \quad \quad 21 \div 3 \\ \quad \quad 7 \end{array}$$

$$\begin{array}{l} \text{11} \quad 35 - 5 - 10 + 3 = \underline{23} \\ \quad \quad 30 - 10 + 3 \\ \quad \quad 20 + 3 \\ \quad \quad 23 \end{array}$$

$$\begin{array}{l} \text{12} \quad 43 - 5 + 6 - 10 = \underline{34} \\ \quad \quad 38 + 6 - 10 \\ \quad \quad 44 - 10 \\ \quad \quad 34 \end{array}$$

## Order of Operations: Parentheses First

A-OPS 3

**Instructions:** Use the Order of Operations Rules to simplify each expression. Write your answer in the space provided and be sure to show your work.

$$\begin{array}{l} \mathbf{1} \quad 3 \times (2 + 5) = \underline{21} \\ 3 \times 7 \\ 21 \end{array}$$

$$\begin{array}{l} \mathbf{2} \quad 10 \times (1 + 6) = \underline{70} \\ 10 \times 7 \\ 70 \end{array}$$

$$\begin{array}{l} \mathbf{3} \quad (5 + 4) \times 2 = \underline{18} \\ 9 \times 2 \\ 18 \end{array}$$

$$\begin{array}{l} \mathbf{4} \quad (15 - 4) \times 3 = \underline{33} \\ 11 \times 3 \\ 33 \end{array}$$

$$\begin{array}{l} \mathbf{5} \quad 25 \div (8 - 3) = \underline{5} \\ 25 \div 5 \\ 5 \end{array}$$

$$\begin{array}{l} \mathbf{6} \quad (8 + 6) \div 7 = \underline{2} \\ 14 \div 7 \\ 2 \end{array}$$

$$\begin{array}{l} \mathbf{7} \quad 30 \div (12 - 7) \times 3 = \underline{18} \\ 30 \div 5 \times 3 \\ 6 \times 3 \\ 18 \end{array}$$

$$\begin{array}{l} \mathbf{8} \quad (14 - 5) \times 6 + 3 = \underline{57} \\ 9 \times 6 + 3 \\ 54 + 3 \\ 57 \end{array}$$

$$\begin{array}{l} \mathbf{9} \quad 4 \times 6 \div (7 - 5) = \underline{12} \\ 4 \times 6 \div 2 \\ 24 \div 2 \\ 12 \end{array}$$

$$\begin{array}{l} \mathbf{10} \quad 28 \div (3 + 2 \times 2) = \underline{4} \\ 28 \div (3 + 4) \\ 28 \div 7 \\ 4 \end{array}$$

$$\begin{array}{l} \mathbf{11} \quad 6 \times (10 - 4) + 3 = \underline{39} \\ 6 \times 6 + 3 \\ 36 + 3 \\ 39 \end{array}$$

$$\begin{array}{l} \mathbf{12} \quad (12 - 3) \div (7 - 4) = \underline{3} \\ 9 \div 3 \\ 3 \end{array}$$

## Simplify Exponents Before Other Arithmetic

A-OPS 4

**Instructions:** Use the Order of Operations Rules to simplify each expression. Write your answer in the space provided and be sure to show your work.

$$\begin{array}{l} \text{1} \quad 1 + 3^2 = \underline{10} \\ 1 + 9 \\ 10 \end{array}$$

$$\begin{array}{l} \text{2} \quad 4^2 \div 2 = \underline{8} \\ 16 \div 2 \\ 8 \end{array}$$

$$\begin{array}{l} \text{3} \quad 15 - 2^3 + 3 = \underline{10} \\ 15 - 8 + 3 \\ 7 + 3 \\ 10 \end{array}$$

$$\begin{array}{l} \text{4} \quad 5 + 4^2 = \underline{21} \\ 5 + 16 \\ 21 \end{array}$$

$$\begin{array}{l} \text{5} \quad 2^2 \times 5 + 4^2 = \underline{36} \\ 4 \times 5 + 16 \\ 20 + 16 \\ 36 \end{array}$$

$$\begin{array}{l} \text{6} \quad 3 \times 2^2 - 4 = \underline{8} \\ 3 \times 4 - 4 \\ 12 - 4 \\ 8 \end{array}$$

$$\begin{array}{l} \text{7} \quad 2^3 \div 4 - 1 = \underline{1} \\ 8 \div 4 - 1 \\ 2 - 1 \\ 1 \end{array}$$

$$\begin{array}{l} \text{8} \quad 11 \times 3 - 5^2 = \underline{8} \\ 11 \times 3 - 25 \\ 33 - 25 \\ 8 \end{array}$$

$$\begin{array}{l} \text{9} \quad 5^2 - 3^2 = \underline{16} \\ 25 - 9 \\ 16 \end{array}$$

$$\begin{array}{l} \text{10} \quad 1^5 + 2^3 \div 4 = \underline{3} \\ 1 + 8 \div 4 \\ 1 + 2 \\ 3 \end{array}$$

$$\begin{array}{l} \text{11} \quad 6^2 + 4 = \underline{40} \\ 36 + 4 \\ 40 \end{array}$$

$$\begin{array}{l} \text{12} \quad 10^2 - 99 = \underline{1} \\ 100 - 99 \\ 1 \end{array}$$

## Order Of Operations Practice

A-OPS 5

**Instructions:** Use the Order of Operations Rules to simplify each expression. Write your answer in the space provided and be sure to show your work.

$$\begin{aligned} 1 \quad 2 \times (4^2 - 4) &= \underline{24} \\ 2 \times (16 - 4) & \\ 2 \times 12 & \\ 24 & \end{aligned}$$

$$\begin{aligned} 2 \quad 14 - (3 + 5) \div 2^2 &= \underline{12} \\ 14 - 8 \div 2^2 & \\ 14 - 8 \div 4 & \\ 14 - 2 & \\ 12 & \end{aligned}$$

$$\begin{aligned} 3 \quad (1 + 3^2) \times 5 &= \underline{50} \\ (1 + 9) \times 5 & \\ 10 \times 5 & \\ 50 & \end{aligned}$$

$$\begin{aligned} 4 \quad 7 \times (7 - 1) + 3 &= \underline{45} \\ 7 \times 6 + 3 & \\ 42 + 3 & \\ 45 & \end{aligned}$$

$$\begin{aligned} 5 \quad 40 \div (12 - 7) &= \underline{8} \\ 40 \div 5 & \\ 8 & \end{aligned}$$

$$\begin{aligned} 6 \quad 7^2 - (5 + 24) &= \underline{20} \\ 7^2 - 29 & \\ 49 - 29 & \\ 20 & \end{aligned}$$

$$\begin{aligned} 7 \quad 2^3 + 30 \div (7 + 3) &= \underline{11} \\ 2^3 + 30 \div 10 & \\ 8 + 30 \div 10 & \\ 8 + 3 & \\ 11 & \end{aligned}$$

$$\begin{aligned} 8 \quad (3^2 \times 3) - (2 + 5^2) &= \underline{0} \\ (9 \times 3) - (2 + 25) & \\ 27 - 27 & \\ 0 & \end{aligned}$$

$$\begin{aligned} 9 \quad (24 + 6) \div (14 - 4 \times 2) &= \underline{5} \\ 30 \div (14 - 8) & \\ 30 \div 6 & \\ 5 & \end{aligned}$$

$$\begin{aligned} 10 \quad [20 - (3 + 4) \times 2] + 5 &= \underline{11} \\ [20 - (7) \times 2] + 5 & \\ [20 - 14] + 5 & \\ [6] + 5 & \\ 11 & \end{aligned}$$

$$\begin{aligned} 11 \quad 6^2 - (11 + 3) \times 2 &= \underline{8} \\ 6^2 - 14 \times 2 & \\ 36 - 14 \times 2 & \\ 36 - 28 & \\ 8 & \end{aligned}$$

$$\begin{aligned} 12 \quad [2^3 + (15 - 7)] \div 8 &= \underline{2} \\ [2^3 + 8] \div 8 & \\ [8 + 8] \div 8 & \\ 16 \div 8 & \\ 2 & \end{aligned}$$