

## Order of Operations with Integers Worksheet

Circle the part of the expression that you would complete first.

1.  $-4 \times 32 + 6$

2.  $3 \times (-2)^3 \div 6$

3.  $(6 + 2) - 15 \div 5 \times 2$

4.  $4(13 - 6)$

5.  $8 - 4(2 + 5^2) \div 12$

Simplify.

6.  $42 \div 6 + 5$

7.  $64 \div 4(2 - 6)$

8.  $4(-12 + 6) \div 3$

9.  $-12^2 \div 4 - 3 \times 2^4$

10.  $6 \times 8 - (4^2 + 2) + 72 \div 8$

11.  $6^2 + 14 \div 2 - 8$

12.  $9 \div 3 + 7 \times 4 \div 2$

13.  $12 \div 6 + 5^2 \times 3$

14.  $-4(1 + 5)^2 \div 6 - (42 + 5)$

15.  $7(5 + 3) \div 4(9 - 2)$

Place a greater than  $>$ , less than  $<$ , or equal to  $=$  symbol between the two equations.

16.  $3^3 + 5 \times 3$  \_\_\_\_\_  $2 + 8(35 \div 7)$

17.  $8 \times (-2) - (-4)^2$  \_\_\_\_\_  $36 \div 9 + 2 \times 5$

18.  $5 \times 2^2 - 2^3(-6 + 3)$  \_\_\_\_\_  $6(2 + 9) - 3^3 \div 9 - 4$

19. Using the numbers below, create two expressions that equal 6.

-4	10	8
2	-3	-5

20. Using integers, write an expression that shows the meaning of these words.

The difference of negative thirteen and eight multiplied by the square of two.

Half of the sum of six and three then divided by seven.

## Order of Operations with Integers Worksheet Solutions

**Circle the part of the expression that you would complete first.**

1. **-4** × **32** + 6
2. 3 × **(-2)**<sup>3</sup> ÷ 6
3. **(6 + 2)** - 15 ÷ 5 × 2
4. 4**(13 - 6)**
5. 8 - 4(2 + **5**<sup>2</sup>) ÷ 12

**Simplify.**

6.    42 ÷ 6 + 5  
      **7 + 5**  
      **12**
7.    64 ÷ 4(2 - 6)  
      **64 ÷ 4 (-4)**  
      **16(-4)**  
      **-64**
8.    4(-12 + 6) ÷ 3  
      **4(-6) ÷ 3**  
      **-24 ÷ 3**  
      **-8**

9.  $-12^2 \div 4 - 3 \times 2^4$   
 $-144 \div 4 - 3 \times 16$   
 $-36 - 3 \times 16$   
 $-36 - 48$   
 $-84$

10.  $6 \times 8 - (4^2 + 2) + 72 \div 8$   
 $6 \times 8 - (16 + 2) + 72 \div 8$   
 $6 \times 8 - (18) + 72 \div 8$   
 $48 - (18) + 9$   
 $30 + 9$   
 $39$

11.  $6^2 + 14 \div 2 - 8$   
 $36 + 14 \div 2 - 8$   
 $36 + 7 - 8$   
 $43 - 8$   
 $35$

12.  $9 \div 3 + 7 \times 4 \div 2$   
 $3 + 28 \div 2$   
 $3 + 14$   
 $17$

13.  $12 \div 6 + 5^2 \times 3$   
 $12 \div 6 + 25 \times 3$   
 $2 + 25 \times 3$   
 $2 + 75$   
 $77$

$$\begin{aligned}
 14. \quad & -4(1+5)^2 \div 6 - (42+5) \\
 & -4(6)^2 \div 6 - (42+5) \\
 & -4(6)^2 \div 6 - (47) \\
 & -4(36) \div 6 - (47) \\
 & -4(36) \div 6 - (47) \\
 & -144 \div 6 - (47) \\
 & -24 - (47) \\
 & -24 - 47 \\
 & -71
 \end{aligned}$$

$$\begin{aligned}
 15. \quad & 7(5+3) \div 4(9-2) \\
 & 7(8) \div 4(9-2) \\
 & 7(8) \div 4(7) \\
 & 56 \div 4(7) \\
 & 56 \div 28 \\
 & 2
 \end{aligned}$$

**Place a greater than >, less than <, or equal to = symbol between the two equations.**

$$\begin{array}{rcl}
 16. \quad 3^3 + 5 \times 3 & = & 2 + 8(35 \div 7) \\
 27 + 5 \times 3 & & 2 + 8(5) \\
 27 + 15 & & 2 + 40 \\
 42 & & 42
 \end{array}$$

$$\begin{array}{rcl}
 17. \quad 8 \times (-2) - (-4)^2 & < & 36 \div 9 + 2 \times 5 \\
 8 \times (-2) - 16 & & 4 + 2 \times 5 \\
 -16 - 16 & & +10 \\
 -32 & & 14
 \end{array}$$

$$\begin{array}{lcl}
 18. & 5 \times 2^2 - 2^3(-6+3) & < & 6(2 + 9) - 3^3 \div 9 - 4 \\
 & 5 \times 4 - 2^3(-6+3) & & 6(11) - 3^3 \div 9 - 4 \\
 & 5 \times 4 - 8(-6+3) & & 6(11) - 27 \div 9 - 4 \\
 & 5 \times 4 - 8(-3) & & 66 - 27 \div 9 - 4 \\
 & 20 - 8(-3) & & 66 - 3 - 4 \\
 & 20 - (-24) & & 59 \\
 & 20 + 24 & & \\
 & 44 & & 
 \end{array}$$

19. Using the numbers below, create two expressions that equal 6.

-4	10	8
2	-3	-5

Solutions will vary.

$$\begin{array}{l}
 -4 - 2(-5) \\
 8 \times 2 - 10 \\
 10 \div 2 + 8 \div 2^2 + -3 + 2
 \end{array}$$

20. Using integers, write an expression that shows the meaning of these words.

The difference of negative thirteen and eight multiplied by the square of two.

$$-13 + 8(2^2)$$

Half of the sum of six and three then divided by seven.

$$\frac{1}{2} (6 + 3) \div 7$$