

Integer Order of Operations Worksheet

All work must be shown for credit.

$$\begin{aligned} 1. \quad & 6 - 15 \div 3 \\ & = 6 - 5 \\ & = 1 \end{aligned}$$

$$\begin{aligned} 2. \quad & -10 \div 2 + 1 \\ & -5 + 1 \\ & = -4 \end{aligned}$$

$$\begin{aligned} 3. \quad & 3(4 - 7) - (-6) \\ & 3(-3) + 6 \\ & = -9 + 6 \\ & = -3 \end{aligned}$$

$$\begin{aligned} 4. \quad & 1 - (9 - 4) \div 5 \\ & 1 - (5) \div 5 \\ & 1 - 1 \\ & = 0 \end{aligned}$$

$$\begin{aligned} 5. \quad & 7 - (-2)^3 \\ & 7 - (-8) \\ & = 15 \end{aligned}$$

$$\begin{aligned} 6. \quad & (-2)^3 - (-5) \\ & -8 + 5 \\ & = -3 \end{aligned}$$

$$\begin{aligned} 7. \quad & 2(-6 + 2) \div 4 \\ & 2(-4) \div 4 \\ & -8 \div 4 \\ & = -2 \end{aligned}$$

$$\begin{aligned} 8. \quad & 7 - 3(4 - 5) \\ & 7 - 3(-1) \\ & 7 + 3 = 11 \end{aligned}$$

$$\begin{aligned} 9. \quad & 8 - (-4)^2 - 5 \\ & 8 - (16) - 5 \\ & = -13 \end{aligned}$$

$$\begin{aligned} 10. \quad & -7 + 1^2 + 2 \\ & -7 + 1 + 2 \\ & = -4 \end{aligned}$$

$$\begin{aligned} 11. \quad & -3^3 - 6(-2) - 2 \\ & -27 + 12 - 2 \\ & = -17 \end{aligned}$$

$$\begin{aligned} 12. \quad & 5 \cdot 3 - (-3)^3 \\ & 15 - (-27) \\ & = 42 \end{aligned}$$

$$\begin{aligned} 13. \quad & -8(2 - 6) \div 2 \\ & -8(-4) \div 2 \\ & 32 \div 2 \\ & = 16 \end{aligned}$$

$$\begin{aligned} 14. \quad & 4(6 - 9) \div 6 \\ & 4(-3) \div 6 \\ & -12 \div 6 \\ & = -2 \end{aligned}$$

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

$$\begin{aligned} 16. \quad & 8 - 3 \cdot 2 - 33 \div 11 \\ & 8 - 6 - 3 \\ & = -1 \end{aligned}$$

$$\begin{aligned} 17. \quad & 9 - 3(6 \div 2) \\ & 9 - 3(3) \\ & 9 - 9 \\ & = 0 \end{aligned}$$

$$\begin{aligned} 18. \quad & (-3)^2 - (-2)^2 - 1 \\ & 9 - 4 - 1 \\ & 5 - 1 \\ & = 4 \end{aligned}$$

$$\begin{aligned} 19. \quad & 7 \cdot 2 - 5 \cdot 3 \\ & 14 - 15 \\ & = -1 \end{aligned}$$

$$\begin{aligned} 20. \quad & 20 \div 4 - 14 \div 2 \\ & 5 - 7 \\ & = -2 \end{aligned}$$

$$\begin{aligned} 21. \quad & 2^3 - 6 \cdot 2 + 3 \\ & 8 - 12 + 3 \\ & = -1 \end{aligned}$$

$$\begin{aligned} 22. \quad & (-3)^2 \cdot (5 - 7)^2 - (-9) \div 3 \\ & 9 \cdot 2^2 - (-3) \\ & 9 \cdot 4 + 3 \\ & 36 + 3 \\ & = 39 \end{aligned}$$

$$\begin{aligned} 23. \quad & 1^3 - 6 \div (-3) \\ & 1 + 2 \\ & = 3 \end{aligned}$$

$$\begin{aligned} 24. \quad & 4 \cdot 5 - 10 - 2(1 - 2) + 5 \\ & 20 - 10 - 2(-1) - 5 \\ & 10 + 2 - 5 \\ & 12 - 5 \\ & = 7 \end{aligned}$$

$$25. (-1) \cdot (2-6)^2 \div 8 + 8 - 3 \cdot 4 \quad 26. 5 - (-3)^2 - 6$$

$$\begin{array}{l} (-1)(-4)^2 \div 8 + 8 - 12 \\ (-1)(16) \div 8 + 8 - 12 \\ -16 \div 8 + 8 - 12 \end{array} \quad \begin{array}{l} 5 - 9 - 6 \\ = -10 \end{array}$$

$$27. 10 \div 5 - (-2)^2$$

$$2 - 4 = -2$$

$$28. 20 - 2 \cdot 7 + 1 - (-3) + 10$$

$$20 - 14 - 1 + 3 + 10 = 18$$

Given $w = -1$, $x = 6$, $y = 3$, and $z = -2$; evaluate the following:

$$29. 4w + 2y$$

$$4(-1) + 2(3)$$

$$-4 + 6 = 2$$

$$30. x - 3(-z)$$

$$6 - 3(-(-2))$$

$$6 - 6 = 0$$

$$31. xy \div z$$

$$(6)(3) \div -2$$

$$18 \div -2 = -9$$

$$32. 9z \div x$$

$$9(-2) \div 6$$

$$-18 \div 6 = -3$$

$$33. x^2 - y^2$$

$$6^2 - 3^2$$

$$36 - 9 = 27$$

$$34. y^2 - z^2$$

$$3^2 - (-2)^2$$

$$9 - 4 = 5$$

$$35. \frac{2x + y}{z + w}$$

$$\frac{2(6) + 3}{-2 + (-1)} = \frac{15}{-3} = -5$$

$$36. \frac{3x - z}{-w}$$

$$\frac{3(6) - (-2)}{-(-1)} = \frac{20}{1} = 20$$

$$37. \frac{x + w}{y - z} = \frac{6 + (-1)}{3 - (-2)} = \frac{5}{5} = 1$$

$$38. \frac{xy}{z} \div w$$

$$\frac{(6)(3)}{-2} = -9$$

$$39. (-x + z)^2 \div 8$$

$$(-6 + -2)^2 \div 8$$

$$(-8)^2 \div 8$$

$$64 \div 8 = 8$$

$$40. (y + z)^2 + (w - x)^2$$

$$(3 + (-2))^2 + (-1 - 6)^2$$

$$5^2 + (-7)^2$$

$$25 + 49 = 74$$

ANSWERS

1. 1 3. -3 5. 15 7. -2 9. -13 11. -17 13. 16 15. -6 17. 0 19. -1 21. -1 23. 3
 25. -6 27. -2 29. 2 31. -9 33. 27 35. -5 37. 1 39. 8