

1-2 Skills Practice

Order of Operations

Evaluate each expression. Show EACH step!

5. $(5 + 4) \cdot 7$

$9 \cdot 7$
 $\boxed{63}$

6. $(9 - 2) \cdot 3$

7. $4 + 6 \cdot 3$

$4 + 18$
 $\boxed{22}$

8. $12 + 2 \cdot 2$

9. $(3 + 5) \cdot 5 + 1$

$8 \cdot 5 + 1$
 $40 + 1$
 $\boxed{41}$

10. $9 + 4(3 + 1)$

11. $30 - 5 \cdot 4 + 2$

$30 - 20 + 2$
 $10 + 2$
 $\boxed{12}$

12. $10 + 2 \cdot 6 + 4$

13. $14 \div 7 \cdot 5 - 3^2$

$2 \cdot 5 - 9$
 $10 - 9$
 1

14. $5 + [30 - (6 - 1)^2]$

15. $2[12 + (5 - 2)^2]$

$2[12 + (3)^2]$
 $2[12 + 9]$ $\boxed{42}$
 $2[21]$

17. $\frac{2(15 - 3 \cdot 4)^3}{3^2 - 3}$

$\frac{2(15 - 12)^3}{9 - 3}$
 $\frac{2(3)^3}{6}$

$\frac{2 \cdot 27}{6}$

$\frac{54}{6} = \boxed{9}$

18. $6 + \frac{40 - 3(10 + 2)}{-2}$

$6 + \frac{40 - 3(12)}{-2}$

19. $22 - \sqrt{4 + 3(4)} + 17$

$22 - \sqrt{4 + 12} + 17$
 $22 - \sqrt{16} + 17$

Chapter 1 $6 + \frac{40 - 36}{-2}$
 $6 + \frac{4}{-2}$

$6 + -2$

$\boxed{4}$

13

$22 - 4 + 17$
 $18 + 17$
 $\boxed{35}$

Evaluate each expression if $x = 6$, $y = 8$, and $z = 3$. (Substitute the known value in using parenthesis)

1. $xy + z$

2. $yz - x$

$$\begin{aligned} & (6)(8) + (3) \\ & 48 + 3 \quad \boxed{51} \end{aligned}$$

3. $2x + 3y - z$

4. $2(x + z) - y$

$$\begin{aligned} & 2(6) + 3(8) - (3) \\ & 12 + 24 - 3 \\ & 36 - 3 \quad \boxed{33} \end{aligned}$$

5. $5z + (y - x)$

6. $5x - (y + 2z)$

$$\begin{aligned} & 5(3) + (8 - 6) \\ & 15 + 2 \\ & 17 \end{aligned}$$

7. $x^2 + y^2 - 10z$

8. $z^3 + (y^2 - 4x)$

$$\begin{aligned} & (6)^2 + (8)^2 - 10(3) \\ & 36 + 64 - 30 \quad \boxed{70} \\ & 100 - 30 \end{aligned}$$

9. $\frac{y + xz}{2}$

10. $\frac{3y + x^2}{z}$

$$\frac{8 + (6)(3)}{2}$$

$$\frac{8 + 18}{2}$$

$$\frac{26}{2} \quad \boxed{13}$$