

Simplify the numerical expressions. Remember to follow the order of operations.

PEMDAS

$$1. \begin{array}{c} 3 - 10 + 5 + 1 \\ 3 - 2 + 1 \\ 1 + 1 \\ \boxed{2} \end{array}$$

$$2. \frac{-8 + 20}{-4} = \frac{12}{-4} = \boxed{-3}$$

$$3. \begin{array}{c} -54 - 11 \\ -5 \mid -7 \mid \\ -5(7) \\ \boxed{-35} \end{array}$$

$$4. \begin{array}{c} (4)(-12) + (2)(-8) \\ 48 + (-16) \\ \boxed{32} \end{array}$$

$$5. \begin{array}{c} ((3 - 10)^2 - 4) + 2 \cdot 5^2 \\ ((-7)^2 + 4) + 2 \cdot 5^2 \\ (49 + 4) + 2 \cdot 25 \\ 53 + 50 \\ \boxed{103} \end{array}$$

Evaluating Algebraic Expressions with Integers

Evaluate each expression when $x = -3$, $y = -2$ and $z = 6$

$$6. \begin{array}{c} x - y \\ (-3) - (-2) \\ -3 + 2 \\ \boxed{-1} \end{array}$$

$$7. \begin{array}{c} (xy)^2 \\ ((-3)(-2))^2 \\ 6^2 \\ \boxed{36} \end{array}$$

$$8. \begin{array}{c} xy^2 \\ (-3)(-2)^2 \\ (-3)(4) \\ \boxed{-12} \end{array}$$

$$9. \begin{array}{c} x - zy \\ (-3) - (6)(-2) \\ -3 - (-12) \\ -3 + 12 \\ \boxed{9} \end{array}$$

$$10. \begin{array}{c} y - |xz| \\ (-2) - |(-3)(6)| \\ -2 - |-18| \\ -2 - 18 \\ -2 + (-18) \\ \boxed{-20} \end{array}$$