

Evaluating Expressions

To Evaluate an Expression:

- 1) Distribute if there are parenthesis
- 2) Combine like terms
- 3) Replace each variable with a given value and simplify (evaluating step)

Ex 1: Evaluate the expression if $x=3$, $y=5$, and $z=-2$

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

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

$$3 + (-2) + (-5)$$

$$\boxed{-4}$$

Ex 2: $\boxed{2}(7x - 1y) - z - x \boxed{+3}(y - z)$

$$\textcircled{1} \quad \underline{14x} - \boxed{2y} \textcircled{-z} - x \boxed{+3y} \textcircled{-3z}$$

$$14x - 1x - 2y + 3y - 1z - 3z$$

$$\textcircled{2} \quad 13x + 1y - 4z$$

$$\textcircled{3} \quad 13(3) + 1(5) - 4(-2)$$

$$39 + 5 + 8$$

$$\boxed{52}$$