

SEPTEMBER 30, 2014^{4TH}

STARTER 6,7,8 → (2) 4,5 → (1)

$$\begin{aligned} \textcircled{1} \quad 7a + 3 \text{ if } a = -2 \\ &= 7(-2) + 3 \\ &= -14 + 3 \\ &= -11 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad a + 3b \text{ if } a = 2 \\ \quad \quad \quad \quad \quad \quad \quad b = -2 \\ &= 2 + 3(-2) \\ &= 2 + -6 \\ &= -4 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2 - y \text{ if } x = -3 \\ \quad \quad \quad \quad \quad \quad \quad y = 2 \\ &= (-3)^2 - 2 \\ &= 9 - 2 \\ &= 7 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad 5n^2 - m \text{ if } n = 3 \\ \quad \quad \quad \quad \quad \quad \quad m = -5 \\ &= 5(3)^2 - (-5) \\ &= 5 \cdot 9 + 5 \\ &= 45 + 5 \\ &= 50 \end{aligned}$$

9/30 Combining all operations with Integers

Compute:

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$$\begin{aligned} & |(-4) + (+4)| - 6 \\ & = |0| - 6 \\ & = 0 - 6 \\ & = -6 \end{aligned}$$

$$\begin{aligned} & \frac{12}{(-3) + (+6)} \cdot (-3) \\ & = \frac{12}{3} \cdot (-3) \\ & = 4 \cdot (-3) \\ & = -12 \end{aligned}$$

$$\begin{aligned} & \underline{|3 \cdot (-1)|} - 6 \cdot (-4) \\ & = |-3| - 6 \cdot (-4) \\ & = 3 + 24 \\ & = 27 \end{aligned}$$

$$\begin{aligned} & \textcircled{3^2} \frac{(-13) + (-1)}{-3} \\ & = 9 \cdot \frac{-12}{-3} \\ & = 9 \cdot 4 \\ & = 36 \end{aligned}$$

Evaluate each for $m = -8, n = -4$

$$\begin{aligned} & \overline{+} \quad \overline{+} \quad \overline{+} \quad \overline{-} \\ & m - (n + 3) \\ = & -8 - ((-4) + 3) \\ = & -8 + (+1) \\ = & \underset{-8+1}{-7} \end{aligned}$$

$$\begin{aligned} & mn - n^2 \\ = & (-8)(-4) - \underbrace{(-4)^2}_{-4 \cdot -4} \\ = & \underline{(-8)(-4)} - 16 \\ = & 32 - 16 \\ = & 16 \end{aligned}$$

Evaluate each for

$$x = -10, y = 5, z = -2$$

Homework

$$\frac{x^2}{z} - y$$

$$\frac{y^2 + 5}{x} - z$$

$$\frac{xyz}{y^2}$$

$$\frac{z^2 - x + 1}{y}$$

$$= \frac{(-2)^2 - (-10) + 1}{5}$$

$$= \frac{4 + 10 + 1}{5}$$

$$= \frac{15}{5}$$

$$= 3$$

Homework

Due