

The Distributive Property

Simplify.

$$\begin{aligned} \textcircled{1} \quad & 5(y-2) \\ & 5(y) - 5(2) \\ & \boxed{5y - 10} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & (3m-8)(-4) \\ & (3m)(-4) - 8(-4) \\ & \boxed{-12m + 32} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & -(2c-12) \\ & (-1)(2c-12) \\ & \boxed{-2c + 12} \end{aligned}$$

What sum or difference is equivalent to $\frac{8m-5}{13}$?

$$\begin{aligned} \textcircled{4} \quad \frac{8m-5}{13} &= \frac{1}{13}(8m-5) \quad \text{Write division as multiplication} \\ &= \left(\frac{1}{13}\right)(8m) - \left(\frac{1}{13}\right)(5) \quad \text{Distributive Property} \\ &= \boxed{\frac{8}{13}m - \frac{5}{13}} \quad \text{Simplify} \end{aligned}$$

Simplify. (Combine Like Terms)

$$\textcircled{5} \quad \underline{5m} - \underline{2n} - \underline{7n} - \underline{12} - \underline{8m}$$

$$\boxed{-3m - 9n - 12}$$

$$\textcircled{6} \quad \underline{7x^2} - \underline{8x^2} - \underline{3x} + \underline{8}$$

$$\boxed{-x^2 - 3x + 8}$$