

explain-math example

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0.1 Basic Math Example

Initial Statement :: $\Downarrow \{ -2(x + 2) = 6$

Distribute out -2 :: $\Downarrow \left\{ \begin{array}{l} (-2 \cdot x) + (-2 \cdot 2) = 6 \\ -2x - 4 = 6 \end{array} \right.$

Remove -4 from the left :: $\Downarrow \left\{ \begin{array}{l} -2x - 4 + 4 = 6 + 4 \\ -2x = 10 \end{array} \right.$

Remove -2 from the left :: $\Downarrow \left\{ \begin{array}{l} \frac{-2x}{-2} = \frac{10}{-2} \\ \frac{-2x}{-2} = \frac{10}{-2} \\ x = -5 \end{array} \right.$

\Downarrow

sol.

$$x = -5$$

0.2 Basic Physics Example

Initial Formula :: $\Downarrow \{ p = mv$

Variables :: $\Downarrow \left\{ \begin{array}{l} p = ? \text{ kg } \frac{\text{m}}{\text{s}} \\ m = 3.0 \text{ k.g} \\ v = 5.0 \text{ m/s East} \end{array} \right.$

Plug & solve :: $\Downarrow \{ p = 3 \cdot 5$

\Downarrow

sol.

$$p = 15 \text{ kg} \cdot \frac{\text{m}}{\text{s}}$$