

18 6.3 Solving Equations using Fractions (division)

Name _____

Blk _____

Review

Identify terms in Expressions or Equations

↳ Terms R separated by +/=/ signs

Ex $(6x) - 4 = 26 \rightarrow 26 = -4 + 6x$

terms

Solving for X (Algebra)

$$\begin{aligned} -4 &= 26 - 6x \\ -26 & \quad -26 \\ -30 &= -6x \\ \div -6 & \quad \div -6 \\ \boxed{+5} &= X \end{aligned}$$

or

$$\begin{aligned} -4 & \div -26 = 26 - 6x \\ -26 - 4 &= -6x \\ -30 &= -6x \\ \div -6 & \quad \div -6 \\ \boxed{5} &= X \end{aligned}$$

check!

$$\begin{aligned} -4 &= 26 - 6(5) \\ -4 &= 26 - 30 \\ \boxed{-4} &= -4 \checkmark \end{aligned}$$

New

The line in a fraction means divide!

Ex 1

Grandpa has enough gift cards to give an equal # to each of his 4 grandchildren. Grandpa gave every child 5 gift cards, how many did he start with?

1) Let X = starting # g.c.

$$X \cdot \frac{1}{4} = (5) \cdot 4$$

pdf

$$\frac{X}{4} \cdot \frac{4}{1} = \frac{4x}{4} = X$$

$$\boxed{X = 20}$$

- 1) circle terms
- 2) +/- terms
- 3) \div terms
- 4) check!

$$\frac{(20)}{4} = 5 \quad \boxed{5 = 5} \checkmark$$