

Digits LESSON 2-1

10/24/2019

1

Goal: I will be able to solve 2-step equations

Locking
4 minutes approx
Variables: in

Here's How - Notes & Examples

Whatever you do to one side, you do the same to the other

$$3 = 3$$

$$2 + 3 = 3 + 2$$

2

Mult./Div. Property of Equality

Whenever you multiply or divide on one side, you need to multiply or divide on the other

Variable

Use a letter to represent an unknown quantity

X, y, a

3

Solving Equations

Get the variable all by itself

Examples

a) $\Delta \Delta = 14$
 $\frac{\Delta \Delta}{2} = \frac{14}{2}$ Divide both sides by 2
 $\Delta = 7$

b) $\square + \frac{1}{5} = \frac{11}{5}$
 take 5 circles away
 $\square = \frac{6}{5}$

Get the "stick" by itself

4

Step 1 Subtract 6

Step 2 Divide by 2

Check

c) $\square + 6 = 30$
 $\square + 6 - 6 = 30 - 6$
 $\square = 24$
 $\frac{\square}{2} = \frac{24}{2}$
 $\square = 12$

Check
 $12 + 6 = 18 \neq 30$
 $24 + 6 = 30$
 $30 = 30 \checkmark$

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Need to make it 1 cookie

Multiply by 2

d) $\square = \$0.45$
 $\frac{1}{2} c = 0.45$
 $2(\frac{1}{2} c) = 2(0.45)$
 $c = 0.90$
 $\frac{12}{3} \cdot 4 = 12 \cdot \frac{4}{3}$

e) $\square = \$12$
 $\frac{3}{4} p = 12$
 $(\frac{4}{3}) (\frac{3}{4} p) = (\frac{4}{3}) (12)$
 $p = 16$

6

Multiply by the reciprocal

f) $\square = \frac{1}{2}$ gallon
 $\frac{5}{8} j = \frac{1}{2}$
 $\frac{8}{5} (\frac{5}{8} j) = \frac{8}{5} (\frac{1}{2})$
 $j = \frac{4}{5}$ gallon

7

Symbols to Represent Equations

Set Up with Pictures

add 3 neg squares

$\square = +1$
 $\blacksquare = -1$
 $\square = X$
 $\blacksquare = -X$

2) $X + 3 = -4$

$\square + \square + \square = -4$

$\square = -7$