Literal Equations Day 1

Solve each equations.

1. 5 + x = -2

$-5 \quad -5 \quad x = -7$

x = -7

2. $\frac{c+5}{4} = 6$ $\cdot 4$ $\cdot 4$

$c + 5 = 24$

$-5 \quad -5$

$c = 19$

c = 19

3. 10k -6 = 9k +2

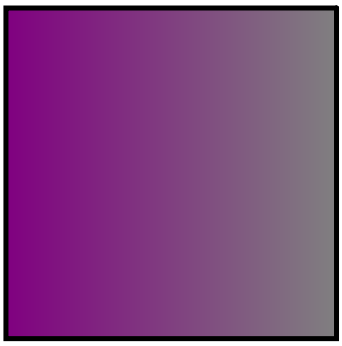
$-9k \quad -9k$

$k - 6 = 2$

$+6 \quad +6$

$k = 8$

k = 8



Literal Equation:

an equation with 2 or more variables.

To solve:

inverse operations

PEMDAS ⇒ Backwards

Add → Subtract

Divide → Multiply

Square x^2 ⇒ Square Root $\sqrt{\ }$

$x + 7 = -12$
$-7 \quad -7$
$x = -19$

solve a

$a + b = c$
$-b \quad -b$
$a = c - b$
or $a = -b + c$

$y - 9 = 34$
$+9 \quad +9$
$y = 43$

Solve for d

$d - e = f$
$+e \quad +e$
$d = e + f$
or $d = f + e$

$\frac{-6x}{-6} = \frac{-30}{-6}$
$x = 5$

$\frac{C}{2\pi} = \frac{2\pi r}{2\pi}$ solve for r.
$\frac{C}{2\pi} = r$

$-4 \cdot \frac{y}{-4} = 8 \cdot -4$
$y = -32$

$D = \frac{m}{v}$ solve for m.
$Dv = m$

2 Step.

Ex $P = 2l + 2w$

$-2l \quad -2l$

Solve for w. $P - 2l = 2w$

$\frac{P-2l}{2} = \frac{2w}{2}$

$\frac{P-2l}{2} = w$

Ex $2A = bh$

Solve b. $\frac{2A}{h} = \frac{bh}{h}$

$\frac{2A}{h} = b$

Ex $S = \pi r l + \pi r^2$

Solve for l $-\pi r^2 \quad -\pi r^2$

$S - \pi r^2 = \pi r l$

$\frac{S-\pi r^2}{\pi r} = \frac{\pi r l}{\pi r}$

$\frac{S-\pi r^2}{\pi r} = l$

Ex. $mS = W - 10e$. m

$Sm = W - 10e$

$+10e \quad +10e$

$Sm + 10e = W$

$$\frac{I}{rt} = \frac{Prt}{rt}$$

$$\frac{I}{rt} = P$$