# December 17, 2014th

## Starter

Solve each equation for the given variable.

① $2k+1=-9$

$-1 \quad -1$

$\frac{2k}{2} = \frac{-10}{2}$

$k=-5$

② $\frac{n}{-3}+2=1$

$-2 \quad -2$

$-3 \cdot \frac{n}{-3} = -1 \cdot -3$

$n=3$

③ $-10=8-2h$

$-8 \quad -8$

$\frac{-18}{-2} = \frac{-2h}{-2}$

$9=h$

# 12/17 Solving Multi-Step Equations with Integers

**Steps for solving today's multi-step equations:**

1. Get rid of ( )
   "shoot the arrows"
2. Undo +/-
   Get rid of "extras"
3. Undo x/÷

$$3(4k-3)=-81$$

$$12k-9=-81$$

$$+9 \quad +9$$

$$\frac{12k}{12}=\frac{-72}{12}$$

$$k=-6$$

# Try these...

$2(3x-1)=10$

$6x-2=10$

$+2 \quad +2$

$\frac{6x}{6}=\frac{12}{6}$

$x=2$

$-6=3(4-3x)$

$-6=12-9x$

$-12 \quad -12$

$\frac{-18}{-9}=\frac{-9x}{-9}$

$2=x$

$-4(2x-3)=52$

$-8x+12=52$

$-12 \quad -12$

$\frac{-8x}{-8}=\frac{40}{-8}$

$x=-5$

# Homework

Blue WS9

## Due Thursday