## Solving Equations by Multiplying and Dividing

6<sup>th</sup> Grade Mathematics Mr. Wong

#### Get the variable by itself.

# Remember the variable is the "unknown"

#### Solve: -2b = 30

-2b = 30- -2  $\div$  -2

b = -15

- Put a line down the equal sign
- Get the "b" by itself
  - Cover the "b"
  - What doesn't belong?
- "-2" Do the opposite to move it to the other side
- Now is "b" by itself?

Solve: -28 = 7m

 $\begin{array}{c} -28 \neq 7m \\ \div 7 & \div 7 \end{array}$ 

 $-4 \pm m$ 

• Put a line down the equal sign

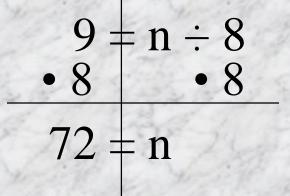
- Get the "m" by itself
  - Cover the "m"
  - What doesn't belong?
- "7" Do the opposite to move it to the other side
- Now is "m" by itself?

Solve:  $b \div -6 = 20$ 

 $b \div -6 = 20$ • -6 • -6 b = -120 • Put a line down the equal sign

- Get the "b" by itself
  - Cover the "b"
  - What doesn't belong?
- "-6" Do the opposite to move it to the other side
- Now is "b" by itself?

Solve:  $9 = n \div 8$ 



## by Multiplying and Dividing

#### The End!