

Solving Equations by Adding and Subtracting



7th Grade Mathematics

Mr. Wong

Solving Equations

Get the variable by itself.

Remember the variable is the
“unknown”

Solving Equations

Solve: $x - 2 = 0$

$$\begin{array}{r|l} x - 2 = 0 & \\ + 2 & + 2 \\ \hline x = 2 & \end{array}$$

- Put a line down the equal sign
- Get the “x” by itself
 - Cover the “x”
 - What doesn’t belong?
- “2” Do the opposite to move it to the other side
- Now is “x” by itself?

Solving Equations

Solve: $x + 4 = 0$

$$\begin{array}{r|l} x + 4 = 0 & \\ - 4 & - 4 \\ \hline x = -4 & \end{array}$$

- Put a line down the equal sign
- Get the “x” by itself
 - Cover the “x”
 - What doesn’t belong?
- “4” Do the opposite to move it to the other side
- Now is “x” by itself?

Solving Equations

Solve: $-45 = x + (-3)$

$$\begin{array}{r|l} -45 = & x + (-3) \\ +3 & +3 \\ \hline -42 = & x \end{array}$$

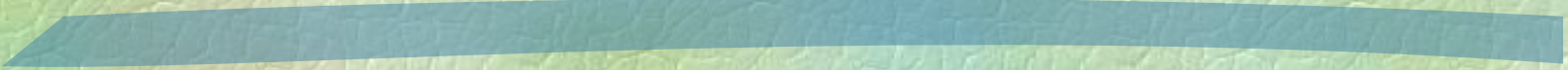
- Put a line down the equal sign
- Get the “x” by itself
 - Cover the “x”
 - What doesn’t belong?
- “-3” Do the opposite to move it to the other side
- Now is “x” by itself?

Solving Equations

Solve: $n - 29 - 16 = 246$

$$\begin{array}{r|l} n - 29 - 16 = 246 & \\ + 29 & + 29 \\ \hline n - 16 = 275 & \\ + 16 & + 16 \\ \hline n = 291 & \end{array}$$

Solving Equations by Adding and Subtracting



The End!