

Please determine if the following equations would require you to do...

Get,  
Collect,  
or Both

...when solving for the variable.

$$2x + 4 = 12 - 3x$$

"Get"

$$2x + 4 = 12 - 3x$$

$+3x$   $+3x$

$$5x + 4 = 12$$

$$2b + 4 + 14 = 9 - 3b$$

$$5b + 18 = 9$$

# Both

$$2b \boxed{+4} \boxed{+14} = 9 - 3b$$

$$2b \boxed{+18} = 9 - \cancel{3b}$$

$+3b$   $+3b$

$$5b + 18 = 9$$

$$2x + 4 + 6x = 12$$

# Collect Like Terms

$$\boxed{2x} + 4 + \boxed{6x} = 12$$

$$\boxed{8x} + 4 = 12$$

$$5 - 6x = x + 15$$

"Get"

$$5 - \cancel{6x} = x + 15$$

+6x      +6x

$$5 = 7x + 15$$

$$2g + 4 = 5g - 12 + 6g$$

$$4 = 9g - 12$$

# Both

$$2g + 4 = \boxed{5g} - 12 \boxed{+ 6g}$$

$$\cancel{2g} + 4 = 11g - 12$$

~~-2g~~                      -2g

$$4 = 9g - 12$$

$$2 = 12b - 9 + 6 + 4b$$

# Collect Like Terms

$$2 = \boxed{12b} - \textcircled{9} + \textcircled{6} + \boxed{4b}$$

$$2 = \boxed{16b} - \textcircled{3}$$

Which of the following is NOT an example of breaking the "Golden Rule?"

$$\begin{array}{r} 3x + 6 - 12/x = 13 \\ + 12x \quad + 12x \end{array}$$

$$(3x) + 6 - 12x = 13$$

$$-9x + 6 = 13$$

$$\begin{array}{r} 3x + 6 - 12x = 13 \\ - 3x \quad - 3x \end{array}$$

Which of the following is NOT an example of breaking the "Golden Rule?"

$$\begin{array}{r} 3x + 6 - 12/x = 13 \\ + 12x \quad + 12x \end{array}$$

$$\begin{array}{r} 3x + 6 - 12x = 13 \\ - 9x + 6 = 13 \end{array}$$

$$\begin{array}{r} 3x + 6 - 12x = 13 \\ - 3x \quad - 3x \end{array}$$

What is the variable expression for....

**3 consecutive integers**

What is the variable expression for....

**3 consecutive integers**

**$x$  ..... first**

**$x+1$  ..... second**

**$x+2$  ..... third**

What is the variable expression for....

**3 consecutive even integers?**

What is the variable expression for....

3 consecutive even integers?

$x$  ..... first

$x+2$  ..... second

$x+4$  ..... third

What is the variable expression for....

**3 consecutive odd integers?**

What is the variable expression for....

3 consecutive odd integers?

$x$  ..... first

$x+2$  ..... second

$x+4$  ..... third

What is the variable expression for....

**3 consecutive multiples of seven?**

What is the variable expression for....

3 consecutive multiples of seven?

$x$  ..... first

$x+7$  ..... second

$x+14$  ..... third

How do we know a statement is  
OPEN?

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OPEN?

It has a *variable* in it.

Which of the following equations can be solved for  $x$  by doing

then  $+a$  OBS  
 $\div b$  OBS.

$$-bx - a = c$$

$$bx + a = c$$

$$bx - a = c$$

$$-ax + b = c$$

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then  $+a$  OBS  
 $\div b$  OBS.

$$-bx - a = c$$

$$bx + a = c$$

$$bx - a = c$$

$$-ax + b = c$$