

Solving Equations Using the Blob

Name _____

Watch the Blob!

What do you think the purpose of the Blob is?

How do you know where to put the Blob?

Use "the Blob" to make sense of solving multi-step equations – for each of the following equations, use the Blob to cover up the pieces of the equation you are trying to solve for.

Then solve for the variable. Be sure to check your answer by plugging your solution back into the original equation.

Example 1:

Check:

$$20 - \text{Blob} = 2$$

$$20 - 3p = 2$$

What is  ?

Example 2:

Check:

$$\frac{30}{\text{Blob}} = 3$$

$$\frac{30}{b+1} = 3$$

What is  ?

Example 3:

Check:

$$2 + \text{Blob} = 23$$

$$3(y - 1) = \underline{\hspace{2cm}}$$

What is the Blob equal to?

What should we Blob next?

Let's try these together...

Example 4:

Check:

Example 5:

Check:

$$15 - \frac{21}{\text{Blob}} = 12$$

$$\frac{\text{Blob}}{5} = 7$$

Now you try solving the following problems using the Blob...

Level 1 – Two-step equations



Solve the equations.

(1) $45 + 7x = 115$ (2) $8x - 65 = 31$ (3) $-10 + 4x = 10$ (4) $24 = 4x + 8$

(5) $44 + 9x = 107$ (6) $\frac{x}{2} - 6 = 5$ (7) $15 + 6x = 51$ (8) $1 + \frac{x}{9} = 5$

Level 2 – Two-step equations with negatives



Solve the equations.

(1) $-6 = \frac{x}{8} - 2$ (2) $-36 = 2x - 10$ (3) $2 = \frac{x}{-2} - 2$

(4) $-8 = 5x + 17$ (5) $-68 = 22 + 9x$ (6) $-4 + \frac{x}{-3} = -11$

Level 3 – Multi-step equations



Solve the equations.

$$(1) \quad -7 = \frac{5x + 9}{-7}$$

$$(2) \quad 3 = \frac{-3x - 6}{-6}$$

$$(3) \quad -5 = \frac{7x - 5}{-6}$$

$$(4) \quad -5(-4x + 5) = 75$$

$$(5) \quad 196 = 7(-7x - 7)$$

$$(6) \quad 5(6x - 4) = -170$$

$$(7) \quad \frac{-3x - 6}{-3} = 7$$

$$(8) \quad -7(5x + 2) = 231$$

$$(9) \quad 4(-6x - 6) = 48$$

$$(10) \quad \frac{-3x - 4}{5} = 4$$

$$(11) \quad 28 = 7(3x - 5)$$

$$(12) \quad 2 = \frac{3x - 7}{4}$$