
















**Unit 4 Day 2 - What is Substitution? Classwork**

1. Find the value of each shape so that they will add up to give you the specified sums in each row AND each column.













			Row sum = 46
			Row sum = 27
			Row sum = 32
			Row sum = 37
Column sum = 55	Column sum = 46	Column sum = 41	



2. What is the value of each shape?

 = \_\_\_\_\_  = \_\_\_\_\_  = \_\_\_\_\_

3. Which shape did you choose to figure out first, and why? \_\_\_\_\_




4. Find the value of each shape so that they will add up to give you the specified sums in each row AND each column.

			Row sum = 42
			Row sum = 18
			Row sum = 27
			Row sum = 30
Column sum = 50	Column sum = 32	Column sum = 35	

By looking at the leftmost column, what conclusion can you draw about the sum of  and  ?

How does that help you figure out the rest of the puzzle?

5. What is the value of each shape?

 = \_\_\_\_\_  = \_\_\_\_\_  = \_\_\_\_\_

6.  $\bigcirc + \square + \square + \triangle + \triangle + \triangle = 100$

If you knew that  $\square = 15$ , redraw the picture with numbers instead of squares:

Now if you knew that  $\bigcirc = 10$ , redraw the new picture with numbers instead of circles:

What is the value of  $\triangle$ ?

7. If  $\square + \triangle + \bigcirc = 1$  and if  $\square + \triangle = 10$ , then what is  $\bigcirc$ ?

8. Find the value of each shape in the system of equations.

$$\begin{cases} 3 \triangle + 4 \square = 10 \\ \triangle = 2 \square \end{cases}$$

9. Find the value of each shape in the system of equations.

$$\begin{cases} 2 \triangle + 3 \square = 22 \\ \square = 3 \triangle \end{cases}$$

Use what you have learned to solve the following problems:

10.  $\begin{cases} 2x + 3y = 21 \\ x = y - 2 \end{cases}$

11.  $\begin{cases} 4x - 2y = 8 \\ y = 3x - 2 \end{cases}$

12.  $\begin{cases} y = 4x - 1 \\ y = 2x + 5 \end{cases}$