
















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