Systems of Equations - Jigsaw

Color Group: Solve the problem on your task card.

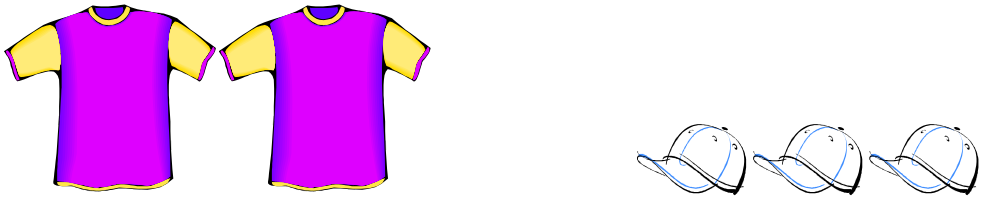
Rainbow Group: Have each person share what was on his/her color group's task card. Share what the group discovered about the problem and solution method. Summarize what similarities and differences you discover.

Visual Algebra

The Red Sox Pro-Shop has the following special deals:

Buy 3 shirts and 2 baseball caps for only $54.50!

Buy 2 shirts and 3 baseball caps for only $50.50!



Write a rule for each special deal.

What is similar about the two deals above? What is different?

How could you find out how much 1 baseball cap is? How much is 1 shirt?

Word Problem

At the ballgame, Jerry bought 2 shirts and 3 baseball caps. His total cost was $50.50. Tom bought 3 shirts and 2 baseball caps. His total cost was $54.50.

How much does 1 shirt cost?
How much does 1 baseball cap cost?

System of Equations

Solve the following:

$$3x + 2y = 54.5$$
$$2x + 3y = 50.5$$

Combination Chart

of shirts

5						
4						
3			$54.50			
2				$50.50		
1						
0						
	0	**1**	**2**	**3**	**4**	**5**

# of baseball caps

1. What does the $54.50 represent in the chart above?
2. What does the $50.50 represent in the chart above?
3. How much would 3 baseball caps cost?
4. How much would 3 shirts cost?
5. How did you use the chart to figure out these prices?
6. How much is 5 baseball caps and 4 shirts?
7. How much is 1 baseball cap?
8. How much is 1 shirt?

Notebook Notation

Sam works at the Red Sox Pro-Shop, and he is very busy. He moves from one customer to another, writing down order for shirts and baseball caps. Below you see how he writes the orders on his note pad:

Order	# of Shirts	# of Baseball Caps	Total Cost
1	2	3	$50.50
2	3	2	$54.50
3	4	6	
4	6	4	
5	9	6	
6	5	0	
7			
8			
9			
10			

Some of the orders do not have total costs listed. What are the prices of these orders?

Make up two new orders and write them in the notebook. Fill in the prices of these orders.

What is the price of 1 shirt?

What is the price of 1 baseball cap?