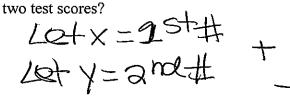
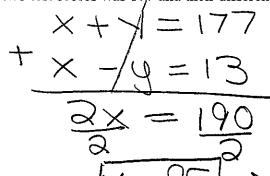
DO NOW: The sum of Bianca's last two test scores was 17,7 and their difference was 13. What were her last





AIM: Solving word problems involving systems of equations-Day 2

1. In your pocket you have a total of 17 nickels and dimes. How can we represent this as an equation

Let
$$y=\#$$
 of dimes $x+y=17$

$$\times + y = 17$$

2. The total value of the coins is \$1.45. How can we represent this as an equation?

How many nickels and how many dimes do you have?

$$-10(X+Y=17) \rightarrow -.10X -.10Y$$

$$-.05X + .10Y = 1.45$$

$$-1.10 \times -1.10 \times = -1.7$$

 $-0.5 \times +.10 \times = 1.40$

$$\frac{35x = -0.35}{0.05}$$

$$\frac{x = 5}{x + 7}$$

$$\frac{x = 5}{x + 7}$$

$$\frac{x = 5}{x + 7}$$

4. In your pocket, you have a total of 36 quarters and dimes. How can we represent this as an equation?

Let
$$X = \#$$
 quarters
Let $Y = \#$ of dimes
 $X + Y = 35$

5. The total value of the coins is \$5.25. How can we represent this as an equation?

6. How many quarters and how many dimes do you have?

$$-.10 \times + \sqrt{=36}$$

Howevery quarters and how many dimes do you have?

$$(x + y = 36)$$
 $-10x - 10y = 3.6$
 $-25x + 10y = 5.35$
 $-25x + 10y = 5.35$
 $-15x = 1.65$
 $-15x = 1.65$
 $-15x = 1.65$
 $-15x = 1.65$
 $-11x = 11$
 $-11x = 36$
 $-11x = 11$

10. Tickets for a high school dance cost \$10 each if purchased in advance of the dance, but \$15 each if bought at the door. How can we represent this as an equation?

11. If 100 tickets were sold and \$1,200 was respected. How can we represent this as an equation?

12. How many tickets were sold in advance and how many were sold at the door?

$$\begin{array}{c}
 10x + 15y = 1200 \\
 -10(x + y = 100)
 \end{array}$$

$$\begin{array}{c}
 10x + 15y = 1200 \\
 -10x - 10y = -1000
 \end{array}$$

$$\begin{array}{c}
 5y = 200 \\
 \hline
 5y = 200
 \end{array}$$

$$\begin{array}{c}
 \hline
 10 + 15y = 1200 \\
 \hline
 -10x - 10y = -1000
 \end{array}$$

$$\begin{array}{c}
 \hline
 10 + 15y = 1200 \\
 \hline
 -10x - 1000
 \end{array}$$

$$\begin{array}{c}
 \hline
 10 + 15y = 1200 \\
 \hline
 -10x - 1000
 \end{array}$$

$$\begin{array}{c}
 \hline
 10 + 15y = 1200 \\
 \hline
 -10x - 1000
 \end{array}$$

$$\begin{array}{c}
 \hline
 10 + 15y = 1200 \\
 \hline
 -10x - 1000
 \end{array}$$

$$\begin{array}{c}
 \hline
 10 + 15y = 1200 \\
 \hline
 -10x - 1000
 \end{array}$$

$$\begin{array}{c}
 \hline
 10 + 15y = 1200 \\
 \hline
 -10x - 1000
 \end{array}$$

$$\begin{array}{c}
 \hline
 10 + 15y = 1200 \\
 \hline
 -10x - 1000
 \end{array}$$

$$\begin{array}{c}
 \hline
 10 + 15y = 1200 \\
 \hline
 -10x - 1000
 \end{array}$$

$$\begin{array}{c}
 \hline
 10 + 15y = 12000 \\
 \hline
 -10x - 1000
 \end{array}$$

$$\begin{array}{c}
 \hline
 10 + 15y = 12000 \\
 \hline
 -10x - 1000
 \end{array}$$

$$\begin{array}{c}
 \hline
 10 + 15y = 12000 \\
 \hline
 -10x - 1000
 \end{array}$$

$$\begin{array}{c}
 \hline
 10 + 15y = 12000 \\
 \hline
 -10x - 1000
 \end{array}$$

$$\begin{array}{c}
 \hline
 10 + 15y = 12000 \\
 \hline
 -10x - 1000
 \end{array}$$

$$\begin{array}{c}
 \hline
 10 + 15y = 12000 \\
 \hline
 -10x - 1000
 \end{array}$$

$$\begin{array}{c}
 \hline
 10 + 15y = 12000
 \end{array}$$

Total amount of

7. The tickets for a dance recital cost \$5.00 for adults and \$2.00 for children. How can we represent this as an equation?

8. If the total number of tickets sold was 295 and the total amount collected was \$1,220. How can we represent this as an equation?

9. How many adult tickets and how many children tickets were sold?

$$5a + ac = 1220$$

 $-2(a + c = 295)$

$$5a + ac = 1000$$

$$-aa - ac = -590$$

$$3a = 630$$

$$a = 210$$

$$a + c = 295$$

$$-210 + c = 295$$

$$-210 - 210$$