

Word Problems

Find the value of two numbers if their sum is 12 and their difference is 4

$$X, Y \quad X + Y = 12$$

$$\text{Div Prop of Eq.} \quad \frac{X - Y = 4}{}$$

$$\frac{2X}{2} = \frac{16}{2}$$

$$X = 8$$

Oct 21-10:14 AM

Ken has 25 coins in nickles and Dimes. He has a total of \$1.65. How many of each coin does he have?

$$N \rightarrow \# \text{ of Nickles} = 17$$

$$D \rightarrow \# \text{ of Dimes} = 8$$

$$\begin{array}{r} N + 8 = 25 \\ -8 \quad -8 \\ \hline N = 17 \end{array} \quad \begin{array}{r} N + D = 25 \\ -D \quad -D \\ \hline N = -D + 25 \end{array}$$

$$0.05N + 0.10D = \$1.65$$

$$0.05(-D + 25) + 0.10D = 1.65$$

$$-0.05D + 1.25 + 0.10D = 1.65$$

$$\begin{array}{r} 0.05D + 1.25 = 1.65 \\ -1.25 \quad -1.25 \\ \hline 0.05D = 0.40 \end{array}$$

$$\frac{0.05D}{0.05} = \frac{0.40}{0.05}$$

$$D = 8$$

$$\begin{array}{r} 0.10D \\ -0.05D \\ \hline 0.05D \end{array}$$

Oct 21-10:22 AM

How many Van = V

How many Bus = B

$$4(1V + 6B) = 372 \quad 4$$

$$\begin{array}{r} 4V + 24B = 1488 \\ - 4V + 12B = 780 \\ \hline \end{array}$$

$$\begin{array}{r} 12B = 708 \\ \hline 12 \quad 12 \end{array}$$

$$V + 6B = 372 \quad \boxed{B = 59}$$

$$V + 6(59) = 372$$

$$V + 354 = 372$$

$$\begin{array}{r} - 354 \quad - 354 \\ \hline \end{array}$$

$$\boxed{V = 18}$$

Oct 21-10:41 AM