

## Variables on Both Sides of the Equal Sign - MTT A

$$13m - 22 = 9m - 6$$

$$m = 4$$

$$\begin{array}{r} 19c + 26 = 41 + 14c \\ -14c \qquad \qquad -14c \end{array}$$

$$\begin{array}{r} 5c + 26 = 41 \\ -26 \quad -26 \end{array}$$

$$\frac{5c}{5} = \frac{15}{5} \quad \boxed{c = 3}$$

$$\begin{array}{r} 15 - 4x = 42 - 7x \\ +7x \qquad \qquad +7x \end{array}$$

$$\begin{array}{r} 15 + 3x = 42 \\ -15 \qquad \qquad -15 \end{array}$$

$$\frac{3x}{3} = \frac{27}{3} \quad \boxed{x = 9}$$

$$\begin{array}{r} 14 + 5y = 50 - 4y \\ +4y \qquad \qquad +4y \end{array}$$

$$\begin{array}{r} 14 + 9y = 50 \\ -14 \qquad \qquad -14 \end{array}$$

$$\frac{9y}{9} = \frac{36}{9} \quad y = 4$$

$$\begin{array}{r} 18w - 2 = 10w + 14 \\ -10w \qquad \qquad -10w \end{array}$$

$$\begin{array}{r} 8w - 2 = 14 \\ +2 \quad +2 \end{array}$$

$$\frac{8w}{8} = \frac{16}{8} \quad \boxed{w = 2}$$

$$\begin{array}{r} -5a + 6 = 6a - 38 \\ +5a \qquad \qquad +5a \end{array}$$

$$\begin{array}{r} 6 = 11a - 38 \\ +38 \qquad \qquad +38 \end{array}$$

$$\frac{44}{11} = \frac{11a}{11} \quad \boxed{4 = a}$$

$$\begin{array}{r} 25u + 74 = 23u + 92 \\ -23u \qquad \qquad -23u \end{array}$$

$$\begin{array}{r} 2u + 74 = 92 \\ -74 \quad -74 \end{array}$$

$$\frac{2u}{2} = \frac{18}{2} \quad \boxed{u = 9}$$

$$\begin{array}{r} -5k - 19 = 5 - 13k \\ +13k \qquad \qquad +13k \end{array}$$

$$\begin{array}{r} 8k - 19 = 5 \\ +19 \quad +19 \end{array}$$

$$\frac{8k}{8} = \frac{24}{8} \quad \boxed{k = 3}$$

$$\begin{array}{r} -11y + 32 = 104 - 5y \\ +11y \qquad \qquad +11y \end{array}$$

$$\begin{array}{r} 32 = 104 + 6y \\ -104 \quad -104 \end{array}$$

$$\frac{-72}{6} = \frac{6y}{6} \quad \boxed{y = -12}$$

## Variables on Both Sides of the Equal Sign - MTT B

$$6x + x = -14$$

$$x = -2$$

$$6 + 4n + 3n = -1$$

$$n = -1$$

$$-90 = -2 - 8(3 - x)$$

$$x = -8$$

$$7(x - 2) + 10(3x - 7) = -84$$

For a field trip 16 students rode in cars and the rest filled busses. How many students were in each bus if 76 were on the trip?

Half of your baseball card collection got wet and was ruined. You bought 12 cards to replace some that were lost. How many did you begin with if you now have 30?

$$\text{Twice a number} + 4 = 56$$

$$\text{A number divided by 3} = 12$$

$$-5x = 5 + x - x$$