

Find the EXACT solution to each equation.

$$1.) \frac{A}{2} = 14 \cdot 2$$

$$A = 28$$

$$2.) 5 - \frac{K}{6} = 17$$

$$-\frac{K}{6} = 12 \cdot -6$$

$$K = -72$$

$$3.) \quad 8 + \frac{3}{11}x = 23$$

$\begin{array}{cc} -8 & -8 \end{array}$

$$\cancel{11} \cdot \frac{\cancel{3}}{\cancel{11}} x = 15 \cdot 11$$

$$\frac{\cancel{11}}{3} x = \frac{\cancel{15}^5 \cdot \cancel{11}}{\cancel{3}} = 55$$

$$4.) \quad 8H - 2 + 2H + 13 = 41$$

$$10H + 11 = 41$$

$$10H = 30$$

$$H = 3$$

$$5.) 5 - 4(2x - 6) + 4x - 15 = 2$$

$$\underline{5} - \underline{8x} + \underline{24} + \underline{4x} - \underline{15} = 2$$

$$-4x + 14 = 2$$

$$-4x = -12$$

$$x = 3$$

$$6.) 2(3x - 9) + 12 = -42$$

$$6x - 18 + 12 = -42$$

$$6x - 6 = -42$$

$$6x = -36$$

$$x = -6$$

$$7.) \quad 5x + 17 = 32 + 3x$$

$$- 3x$$

$$- 3x$$

$$2x + 17 = 32$$

$$2x = 15$$

$$x = \frac{15}{2}$$

$$8.) \quad 8 + 2(x - 4) = 66 - 7x + 19 - 8x$$

$$\cancel{8} + 2x - \cancel{8} = 66 - 7x + 19 - \cancel{8x}$$

$$2x = 85 - 15x$$

$$17x = 85$$

$$x = 5$$

9.) Solve for B

$$A(B - G) + Z = R$$

$$\begin{array}{r} -Z \quad -Z \\ \hline A(B - G) = R - Z \end{array}$$

$$B - G = \frac{R - Z}{A}$$

$$B = \frac{R - Z}{A} + G$$

10.) Solve for Y

$$R = \frac{Y - H}{C}$$

$$RC = Y - H$$

$$RC + H = Y$$

11.) Five consecutive multiples of four have a sum of 260. Write and solve an equation to find these numbers.

$$\begin{array}{ccccccccc} & & & 52 & & 56 & & 60 & \\ \underline{X} & + & \underline{X+4} & + & \underline{X+8} & + & \underline{X+12} & + & \underline{X+16} & = & 260 \\ 44 & & 48 & & & & & & & & \end{array}$$

$$5X + 40 = 260$$

$$5X = 220$$

$$X = 44$$

$$\begin{array}{r} 4 > 4 \\ 8 > 4 \\ 12 > 4 \\ 16 > 4 \\ 20 > 4 \end{array}$$

1.) Four consecutive odd numbers have a sum of -296. Write and solve an equation to find these four numbers.

$$\begin{array}{ccccccccc} & & & -75 & & -73 & & -71 & \\ \underline{X} & + & \underline{X+2} & + & \underline{X+4} & + & \underline{X+6} & = & -296 \\ -77 & & & & & & & & \end{array}$$

$$4X + 12 = -296$$

$$4X = -308$$

$$X = -77$$

$$\begin{array}{c} 1 \\ 3 \\ 5 \\ 7 \\ 9 \end{array}$$

2.) Four consecutive integers have a sum of 154. Write and solve an equation to find these integers.

$$\begin{array}{ccccccc} \underline{X} & + & \underline{X+1} & + & \underline{X+2} & + & \underline{X+3} = 154 \\ 37 & & 38 & & 39 & & 40 \\ & & & & 4X + 6 & = & 154 \\ & & & & 4X & = & 148 \\ & & & & X & = & 37 \end{array}$$

3.) Three consecutive even numbers have a sum of -168. Write and solve an equation to find these numbers.

$$\begin{array}{ccccccc} & & -30 & & -54 & & \\ 2 & & & & & & \\ 4 & & & & & & \\ 6 & & & & & & \\ 8 & & & & & & \\ 10 & & & & & & \\ & & \underline{X} & + & \underline{X+2} & + & \underline{X+4} = -168 \\ & & -58 & & & & \\ & & & & 3X + 6 & = & -168 \\ & & & & 3X & = & -174 \\ & & & & X & = & -58 \end{array}$$

Review Classwork --

In your group, work on the following practice problems:

- Pages: 125 - 127
- Problems: 1-3, 5, 20, 21, 27, 28, 29, 30, 39, 40, 41, 44, 46, 48, 50, 51, 52, 55, 60-62
- Complete on a separate sheet of paper.
- Show YOUR work!
- Discuss answers!