

Consecutive - In a row

Solve. For each, define a variable, translate into an equation, then find the answer to the question.

- 1) The ⁺sum of two consecutive integers is 93. Find the two integers. No decimals
No fractions

Let x = smallest 46
 $x+1$ = 2nd 47

$$(x) + (x+1) = 93$$

$$2x+1 = 93$$

$$\begin{array}{r} -1 \quad -1 \\ 2x+1 = 93 \\ \hline 2x = 92 \end{array}$$

$$x = 46$$

- 2) The ^{x+4}largest of three consecutive even integers is equal to = three times the ^xsmallest. Find all three integers. counting by 2

Let x = smallest 2
 $x+2$ = 2nd 4
 $x+4$ = 3rd 6

$$\begin{array}{r} x+4 = 3x \\ -x \quad -x \\ \hline 4 = 2x \\ 2 = x \end{array}$$

- 3) The ⁺sum of three consecutive odd integers is 40 more than the ^xsmallest. What are the integers? count by 2

Let x = smallest 17
 $x+2$ = 2nd 19
 $x+4$ = 3rd 21

$$(x) + (x+2) + (x+4) = x + 40$$

$$\begin{array}{r} 3x+6 = x+40 \\ -x \quad -6 \quad -x \quad -6 \\ \hline 2x = 34 \end{array}$$

$$2x = 34$$

$$x = 17$$

- 4) The length of a rectangle is 7 cm more than its width. If its perimeter is 78 cm, find the dimensions of the rectangle. add all sides length + width

Let x = width 16 cm
 $x+7$ = length 23 cm

$$(x) + (x+7) + (x) + (x+7) = 78$$

$$\begin{array}{r} 4x+14 = 78 \\ -14 \quad -14 \\ \hline 4x = 64 \end{array}$$

$$4x = 64$$

$$x = 16$$

