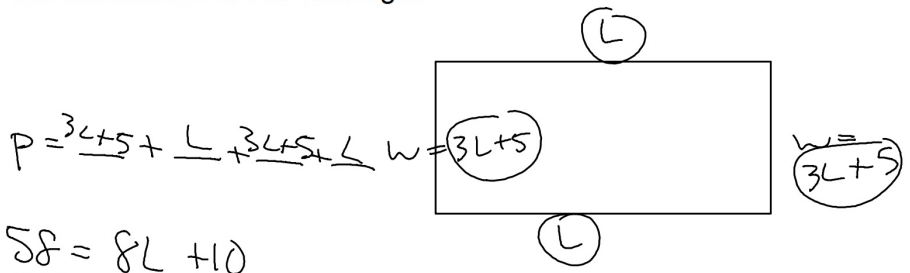
1.
The perimeter of a rectangle is 58 inches. The width is five more than three times the length. Write and solve an equation to find the dimensions of this rectangle.



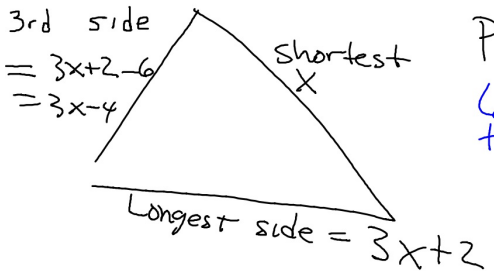
$P = 3L+5 + L + 3L+5 + L \quad W = 3L+5$

$58 = 8L + 10$
$-10 \quad -10$
$\frac{48}{8} = \frac{8L}{8} \quad L = 6$

$W = 3(6)+5 = 23$

Dimensions:
6×23
or
23×6

2. The perimeter of triangle is 68cm. The longest side is two more than three times the shortest side. The third side is six less than the longest side. Write and solve an equation to find the lengths of all three sides.



$P = x + 3x-4 + 3x+2$

$68 = 7x - 2$
$+2 \quad +2$
$\frac{70}{7} = \frac{7x}{7} \quad x = 10$

10, 26, 32

3. Three consecutive integers have a sum of 102. What are these three integers?

Consecutive integers are 1 apart.

x = 1ST INTEGER

$x + x+1 + x+2 = 102$

$3x + 3 = 102$
$-3 \quad -3$
$\frac{3x}{3} = \frac{99}{3} \quad x = 33$

#'s: 33, 34, 35

1.
Four consecutive integers have a sum of -78. Write and solve an equation to find these integers.

$N + N+1 + N+2 + N+3 = -78$

$4N + 6 = -78$
$-6 \quad -6$
$\frac{4N}{4} = \frac{-84}{4} \quad N = -21$

#'s: -21, -20, -19, -18

2.

Three consecutive even numbers have a sum of 270. Write and solve an equation to find these numbers.

consecutive even numbers are 2 apart.

$x + x+2 + x+4 = 270$

$3x + 6 = 270$

$-6 \quad -6$

$\frac{3x}{3} = \frac{264}{3}$

$x = 88$

#'s: 88, 90, 92

3.

Three consecutive odd numbers have a sum of 339. Write and solve an equation to find these numbers.

consecutive odd numbers are 2 apart.

$x + x+2 + x+4 = 339$

$3x + 6 = 339$

$-6 \quad -6$

$\frac{3x}{3} = \frac{333}{3}$

$x = 111$

#'s: 111, 113, 115