

Algebra 1 Bellwork Tuesday, Oct. 27, 2015

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

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

3. Four consecutive odd numbers have a sum of 536. Write and solve an equation to find these numbers.

4. The perimeter of a Quadrilateral (a generic four-sided figure) is 95 inches. The longest side is five less than four times the shortest side. A third side is 14 less than the longest side. The fourth side is one less than three times the shortest side. Write and solve an equation to find the lengths of the four sides.

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ANSWERS

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

Eq: $x + (x+1) + (x+2) + (x+3) = 154$
 $x = \text{1st integer}$
 $4x + 6 = 154 \rightarrow 4x = 148 \rightarrow x = 37$

37, 38, 39, 40

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

$x + (x+2) + (x+4) = -168$
 $x = \text{1st even}$
 $3x + 6 = -168$
 $3x = -174$
 $x = -58$

-58, -56, -54

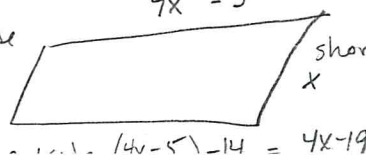
3. Four consecutive odd numbers have a sum of 536. Write and solve an equation to find these numbers.

$x + (x+2) + (x+4) + (x+6) = 536$
 $x = \text{1st odd}$
 $4x + 12 = 536$
 $4x = 524$
 $x = 131$

131, 133, 135, 137

4. The perimeter of a Quadrilateral (a generic four-sided figure) is 95 inches. The longest side is five less than four times the shortest side. A third side is 14 less than the longest side. The fourth side is one less than three times the shortest side. Write and solve an equation to find the lengths of the four sides.

$x = \text{shortest side}$
 $95 = x + (4x-5) + (3x-1) + (3x-1)$
 $95 = 12x - 25$
 $120 = 12x$
 $x = 10$



10, 21, 29, 35