

## Answer on Question #42207 - Mathematics - Algebra

**Problem.** The heights in inches of three basketball players are 3 consecutive integers. If the sum of twice the 1st, 3 times the 2nd, and the 3rd is 437, what are the three heights.

**Solution.** Let  $x$  is the height in inches of the 1st basketball player. Then  $x + 1$  is the height in inches of the 2nd basketball player and  $x + 2$  is the height in inches of the 3rd basketball player.

We form the equation:  $2x + 3(x + 1) + x + 2 = 437$

$$2x + 3x + 3 + x + 2 = 437$$

$$6x + 5 = 437$$

$$6x = 437 - 5$$

$$6x = 432$$

$$x = \frac{432}{6}$$

$x = 72$  (inches) We've found the height of the 1st basketball player;

$x + 1 = 72 + 1 = 73$  (inches) is the height of the 2nd basketball player;

$x + 2 = 72 + 2 = 74$  (inches) is the height of the 3rd basketball player.

**Answer.** 72 inches is the height of the 1st basketball player; 73 inches - of the 2nd; 74 inches - of the 3rd.