Conditions

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

As we can notice, the heights in inches of three basketball players are 3 consecutive integers. So if we consider, that height of 1st is x, then the height of 2nd is equal to (x+1), the height of 3rd is (x+2). And now we must sum these 3 values, 1st will be powered by 2, 2nd by 3, and 3rd by 1, and total is 437:

$$2x + 3(x + 1) + x + 2 = 437$$

$$6x = 432$$

$$x = 72$$

Then, the height of 1st is 72 , 2nd – 73, 3rd – 74 inches.

Answer: 72, 73, 74