

# The hay baler problem essay sample



**ASSIGN  
BUSTER**

POW6 was named, "The Hay Baler Problem", it was about a hay baler who had just finished weighing five bales of hay. The bales was in combinations of two. He weighed bale 1 with 2, 1 with 3, 1 with 4, and every other two-baled combination. In the end, he came up with a set of 10 different weights. And it is your job to find out what each bale weighs by its self.

Processt I thought of every combination of bales. I ended up getting ten different combinations. The weights are listed in order of numbers not in order of weight in pairs of bales. So I knew I needed to figure out the heaviest and the lightest bales.. The smallest combination of bales is 80 so I will divide that by 2 and I get 40 so I know that both numbers will be around 40 I switched the numbers 1-5 for the variables a-e. So  $a= 1$ ,  $b= 2$ ,  $c= 3$ ,  $d= 4$ , and  $e= 5$

$$a + b39 + 41 = 80$$

$$a + c39 + 43 = 82$$

$$a + d39 + 44 = 83$$

$$a + e39 + 47 = 86$$

$$b + c41 + 43 = 84$$

$$b + d41 + 44 = 85$$

$$b + e41 + 47 = 88$$

$$c + d43 + 44 = 87$$

$$c + e43 + 47 = 90$$

$$d + e44 + 47 = 91$$

SOLUTION: The weight of the bales of hay is 39, 41, 43, 44, and 47. I know that I am right because all of the combinations work out so that they all fit exactly right and if you added any 2 bales of hay together they would equal one of the combinations witch are 80, 82, 82, 84, 85, 86, 87, 88, 90, and 91.

Self Assessment: I would give myself a 90 on this pow because i put good effort into it. Also I showed all my work.