

Question:

Melanie is a door-to-door saleswoman. She sold a third of her vacuum cleaners at the green house, 2 more to the red house, and half of what was left at the orange house. If Melanie has 5 vacuum cleaners left, how many did she start with?

Reasoning + Answer:

<think> At the orange house, Melanie sold 2 more than half, so 2 less than half were left ($5 + 2 = 7$) This means half of what she started with is 7 She started with $7 * 2 = 14$ vacuum cleaners
Then the number she sold to the green house was $1/3$ rd of 14, which is $14/3 = 4 \frac{2}{3}$
Since she can't sell $2/3$ of a vacuum cleaner, we know she sold 4 of the green house This means she sold 2 more than 4 to the red house, so $4 + 2 = 6$ to the red house She started with 14 and sold 4 to the green house and 6 to the red house, so $14 - 4 - 6 = 4$ Adding those she had left, $4 + 5 = 9$ vacuum cleaners </think> <answer>9 </answer>

Reward score

2
1
0
-1
-2
-3
-4
-5