

Question:

Greg has an alarm set to ring three times a day as a reminder. When the alarm goes off it continues to ring until Greg turns it off. The first time it went off today it rang four times. The second time it went off it rang for three times as long as the first time. The third time it rang for half as long as the second time. How many times did the alarm ring in all?

Reasoning + Answer:

<think> Greg turned off the alarm for the first time after 4 rings. The second time it rang, the alarm was on for $4 * 3 = 12$ rings. The third time it rang, the alarm was on for $12 / 2 = 6$ rings. Altogether, the alarm rang $4 + 12 + 6 = 22$ times. </think><answer> 22 </answer>