

Question:

RobRoyceand Pedro are contractors getting ready to put a new roof on three homes. If the three homes will need 250 cases of shingleswith the first house needing $\frac{1}{2}$ of the secondand the third needing double the first. How many cases of shingles will the third house need?

Reasoning + Answer:

<think> We know that 3 houses need 250 cases of shingles . So , in total the three houses will need $250 / 3$ cases . So , the second house will need $250 / 3 * \frac{1}{2}$ cases of shingles . So , the first house will need $250 / 3 * \frac{1}{2} * \frac{1}{2}$ cases of shingles . So , the third house will need $250 / 3 - 250 / 3 * \frac{1}{2} - 250 / 3 * \frac{1}{2} * \frac{1}{2}$ cases of shingles . So , the third house will need $250 / 3 * \frac{1}{2} - 250 / 3 * \frac{1}{2} * \frac{1}{2}$ cases of shingles more than the first house . So , the third house will need $250 / 3 * \frac{1}{2} - 250 / 3 * \frac{1}{2} * \frac{1}{2} = 250 / 3 * \frac{1}{2} * \frac{3}{2}$ cases of shingles . So , the third house will need $250 / 3 * \frac{3}{4} = 75$ cases of shingles . </think><answer>75</answer>