

Question:

John has 2 houses with 3 bedrooms each. Each bedroom has 2 windows each. There are an additional 4 windows in each house not connected to bedrooms. How many total windows are there between the houses?

Reasoning + Answer:

<think>John has 2 houses with 3 bedrooms each, for a total of $(2 \times 3) \times 2$ bedrooms = 12 bedrooms. There are $12 \text{ bedrooms} \times 2 \text{ windows} = 24$ windows for bedrooms in each house. There are 24 windows for bedrooms in each of 2 houses so there are $(2 \times 24) \text{ window} = 48$ bedroom window total. Each house has an additional 4 windows not connected to the bedrooms so $(2 \text{ houses} \times 4 \text{ windows}) = 8$ more windows. Each house has two of those windows so 16 windows. There are $16 \text{ windows so far} - 48 \text{ bedroom windows} + 16$, in total there are 32 windows. $48 \text{ bedroom windows} + 32 \text{ windows not in bedrooms} = 80$ windows in 2 house </think><answer>80</answer>

