

Focus
Standards
and Claim

Claim 4
6.G.A
4.MD.A.3

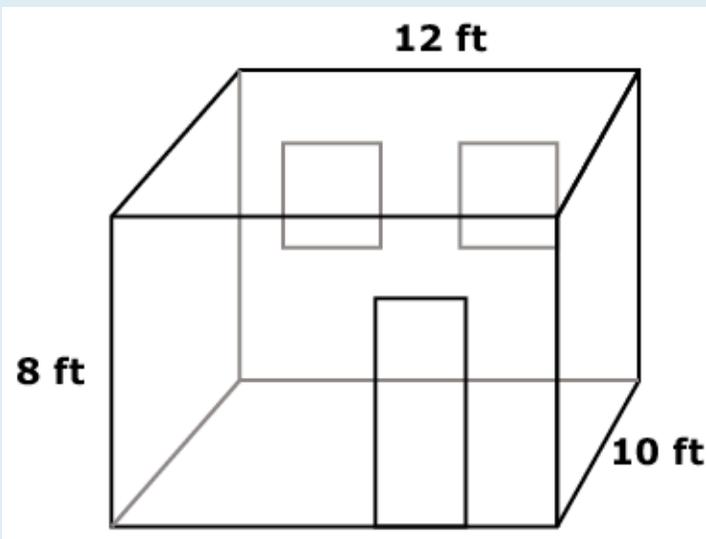
Stimulus

Let's Paint a Room

Your friend Sam wants to paint her room. She wants to paint the ceiling white and the four walls purple.

You are helping Sam determine the cost and the amount of time needed to paint her room.

The room is shaped like a rectangular prism with a height of 8 feet, length of 12 feet, and width of 10 feet as shown.



Additional information about Sam's room:

- The door has an area of 22 square feet.
- The room has 2 square windows.
- Each window opening is 2 feet by 2 feet.

Item Prompt

What is the area, in square feet, of the ceiling?

Scoring Guide

SCORE	1 POINT	0 POINTS
	Correct response: 120	All other responses

Sample Responses

Student Sample A



120

SCORE RATIONALE
Correct Response.

Student Sample B



22

SCORE RATIONALE
Incorrect response. It appears that the student correctly inferred the missing side length, but then added two sides of the rectangle, 10 ft and 12 ft, instead of multiplying using the formula $A = l \times w$.

Student Sample C



52

SCORE RATIONALE
Incorrect response. The student may have attempted to use the formula for finding the perimeter of a quadrilateral, and incorrectly added the side lengths.

Student Sample D



12

SCORE RATIONALE
Incorrect response. The student reported the width of the ceiling instead of the area.