

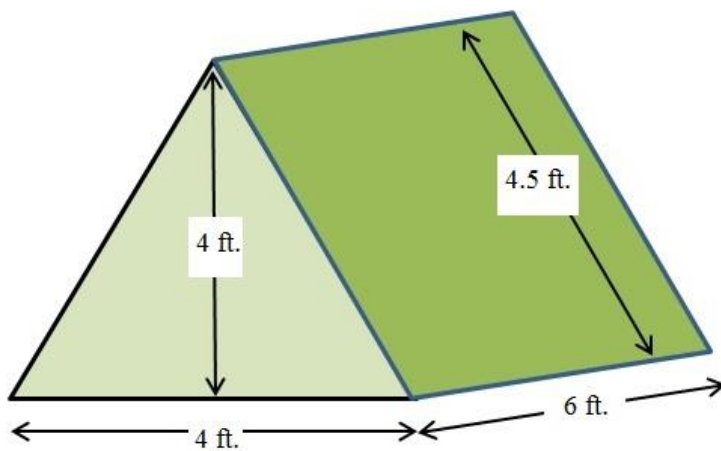
Answer on Question#42749- Math, Other

Task:

Judith works after school at her family's tent company. One of their best selling tents is an A-frame tent that is 4 ft. high and has a rectangular bottom 4 ft. wide by 6 ft. long. The sides of the tent are 4.5 ft. long. How much canvas is needed to make the tent? (determine the surface area)

Solution:

A-frame tent is next:



The overall surface area consists of 5 figures: 2 triangles and 4 rectangles (two on the sides and 1 in the bottom).

1. The area of 1 triangle is $S = \frac{1}{2} * 4 * 4 = 8 \text{ (ft.)}$
2. The area of 1 rectangle on the side is $S = 4.5 * 6 = 27 \text{ (ft.)}$
3. The area of 1 rectangle on the bottom is $S = 4 * 6 = 24 \text{ (ft.)}$

So, the overall area of a tent is: $S = 8 * 2 + 27 * 2 + 24 = 94 \text{ (ft.)}$

Answer:

94 ft.