

The shape of the classroom is a parallelogram.

1) The formula of a volume of a parallelogram is:

$V = l \cdot w \cdot h$, where

- l is for length,
- w is for width
- h is for high.

We have $l = 38$ feet, $w = 24$ feet and $h = 10$ feet.

So, $V = 38 \cdot 24 \cdot 10 = 9120$ (feet 3)

2) The surface area of a parallelogram is the sum of all side's areas, which are rectangles.

There are 6 sides. The formula for each side's area is:

$S = a \cdot b$, where a is length of a rectangle, b – width.

So, the surface area is $S = 2 \cdot S_1 + 2 \cdot S_2 + 2 \cdot S_3 = 2 \cdot l \cdot w + 2 \cdot l \cdot h + 2 \cdot w \cdot h = 1824 + 760 + 480 = 3064$ (feet 2).

Answer: the volume of the class is 9120 cubic feet and the surface area is 3064 square feet.