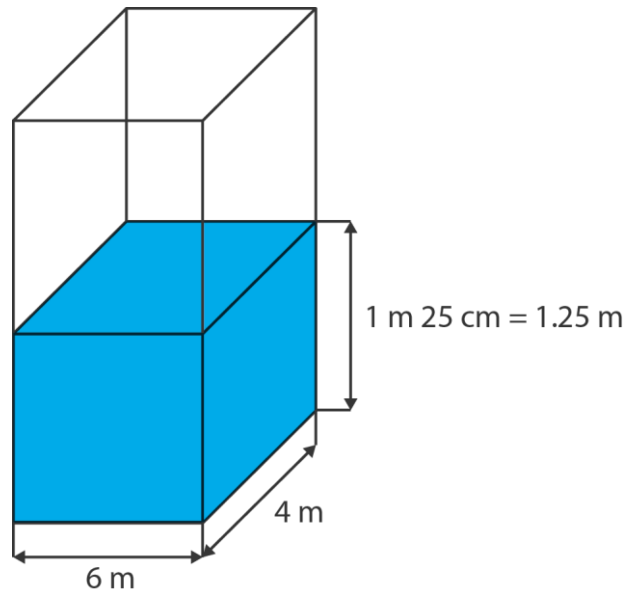


### Answer on Question #43984 – Math – Geometry

A cistern 6 m long, 4 m wide, contains water to a depth of 1 m 25 cm : find the area of the wet surface.

**Solution.**



The area of the bottom wet face of a cistern is equal to

$$S_1 = 6 \cdot 4 = 24 \text{ m}^2.$$

The area of the front and back wet faces of a cistern is equal to

$$S_2 = 6 \cdot 1.25 = 7.5 \text{ m}^2.$$

The area of the left and right wet faces of a cistern is equal to

$$S_3 = 4 \cdot 1.25 = 5 \text{ m}^2.$$

The area of the wet surface is equal to

$$S = S_1 + 2S_2 + 2S_3 = 24 + 15 + 10 = 49 \text{ m}^2.$$

**Answer.**  $S = 49 \text{ m}^2$ .