Grand Ronde Plankhouse

ANSWER KEY

1. Volume of rectangular prism: 30 x 90 x 15 = 40,500 ft^3

   Volume of triangular prism: ½ (30 x 20) x 90 = 27,000 ft^3

   Total Volume: 40,000 + 27,000 = 67,000 ft^3

2. Surface area of rectangular prism (no top):

   2(30 x 15) + 2(90 x 15) + (90 x 30)

   900 + 2,700 + 2,700

   6,300 ft^2

   Surface area of triangular prism (no bottom):

   2(½ 30 x 20) + 2(25 x 90)

   600 + 4500

   5,100 ft^2

   Total surface area: 6,300 + 5,100 = 11,400 ft^2