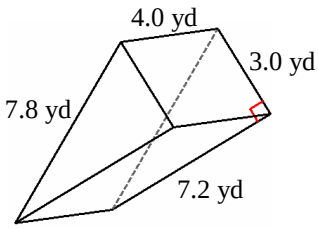
Volume and Surface Area of Triangular Prisms Answer (B)

Instructions: Find the volume and surface area for each triangular prism.

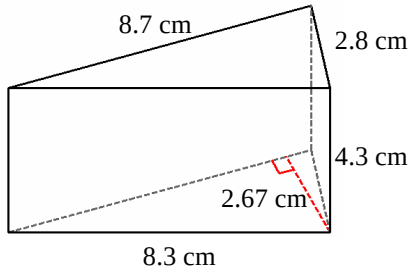
Formula: Volume (V) = 0.5 x *bhl*, Surface Area (A) = *bh*+(*s1*+*s2*+*s3*)*l*

1)



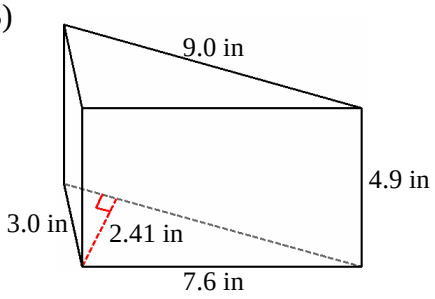
V = 0.5x7.2x3.0x4.0 = 43.2 yd^3
A = (7.2x3.0)+((7.2+3.0+7.8)x4.0) = 93.6 yd^2

2)



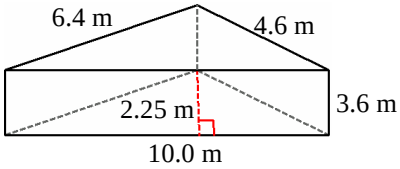
V = 0.5x8.7x2.67x4.3 = 49.9 cm^3
A = (8.7x2.67)+((8.7+2.8+8.3)x4.3) = 108.4 cm^2

3)



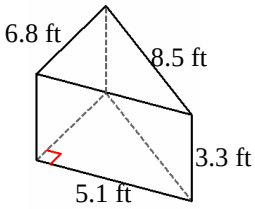
V = 0.5x9.0x2.41x4.9 = 53.1 in^3
A = (9.0x2.41)+((9.0+7.6+3.0)x4.9) = 117.7 in^2

4)



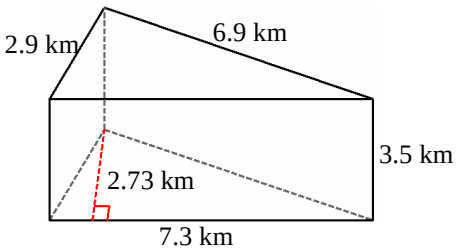
V = 0.5x10.0x2.25x3.6 = 40.5 m^3
A = (10.0x2.25)+((10.0+6.4+4.6)x3.6) = 98.1 m^2

5)



V = 0.5x5.1x6.8x3.3 = 57.2 ft^3
A = (5.1x6.8)+((5.1+6.8+8.5)x3.3) = 102.0 ft^2

6)



V = 0.5x7.3x2.73x3.5 = 34.9 km^3
A = (7.3x2.73)+((7.3+2.9+6.9)x3.5) = 79.8 km^2