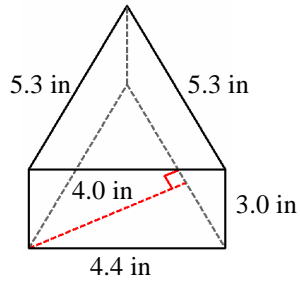# Volume and Surface Area of Triangular Prisms (C)
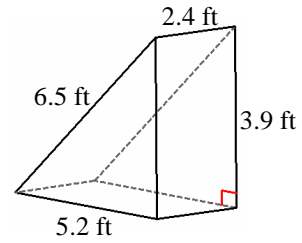
Instructions: Find the volume and surface area for each triangular prism.
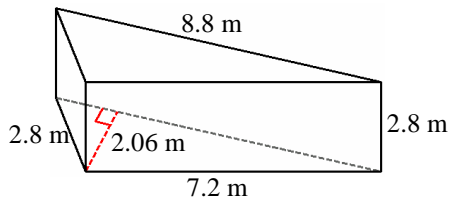
1)

5.3 in   5.3 in
4.0 in
3.0 in
4.4 in

2)

2.4 ft
6.5 ft
3.9 ft
5.2 ft

3)

8.8 m
2.8 m   2.06 m   2.8 m
7.2 m

4)

7.6 yd   9.5 yd
4.6 yd
5.7 yd

5)

8.4 cm
3.3 cm
3.16 cm
3.5 cm
8.1 cm

6)

9.0 mi
5.1 mi
2.54 mi   3.2 mi
7.5 mi
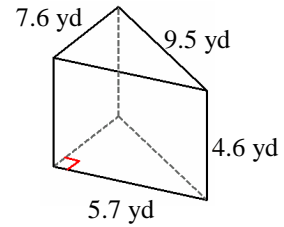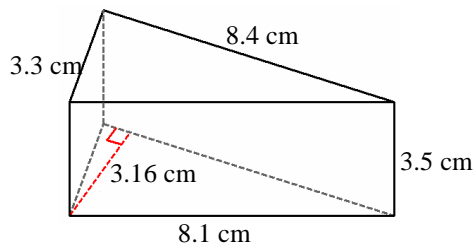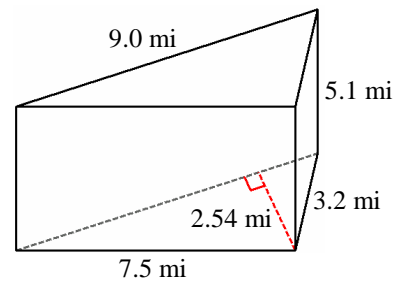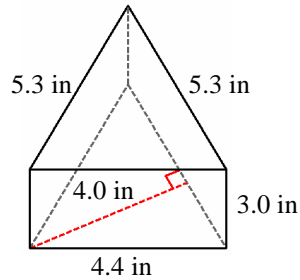
Volume and Surface Area of Triangular Prisms Answer (C)

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

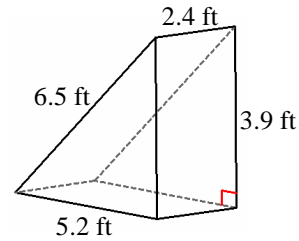**Formula: Volume (V) = 0.5 x *bhl*, Surface Area (A) = *bh*+(*s1*+*s2*+*s3*)*l***

1)

$V = 0.5 \times 5.3 \times 4.0 \times 3.0 = 31.8 \text{ in}^3$
$A = (5.3 \times 4.0)+((5.3+5.3+4.4) \times 3.0) = 66.2 \text{ in}^2$
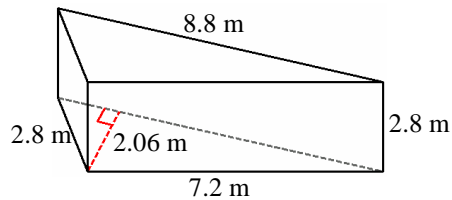
2)

$V = 0.5 \times 5.2 \times 3.9 \times 2.4 = 24.3 \text{ ft}^3$
$A = (5.2 \times 3.9)+((5.2+3.9+6.5) \times 2.4) = 57.7 \text{ ft}^2$
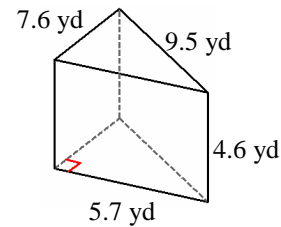
3)

$V = 0.5 \times 8.8 \times 2.06 \times 2.8 = 25.4 \text{ m}^3$
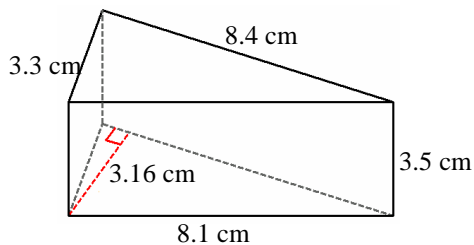$A = (8.8 \times 2.06)+((8.8+2.8+7.2) \times 2.8) = 70.8 \text{ m}^2$

4)

$V = 0.5 \times 5.7 \times 7.6 \times 4.6 = 99.6 \text{ yd}^3$
$A = (5.7 \times 7.6)+((5.7+7.6+9.5) \times 4.6) = 148.2 \text{ yd}^2$

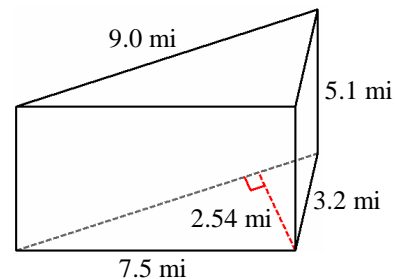5)

$V = 0.5 \times 8.4 \times 3.16 \times 3.5 = 46.5 \text{ cm}^3$
$A = (8.4 \times 3.16)+((8.4+8.1+3.3) \times 3.5) = 95.8 \text{ cm}^2$

6)

$V = 0.5 \times 9.0 \times 2.54 \times 5.1 = 58.3 \text{ mi}^3$
$A = (9.0 \times 2.54)+((9.0+3.2+7.5) \times 5.1) = 123.3 \text{ mi}^2$