Triangular Prisms (E)

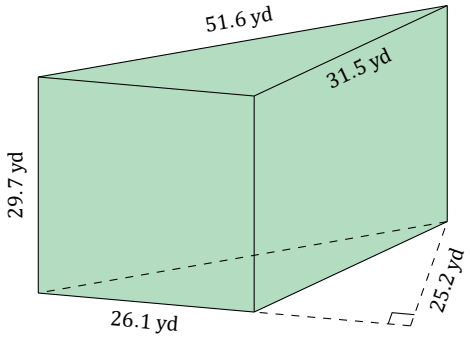
Name: _____ Date: _____

Calculate the volume and surface area of each triangular prism.

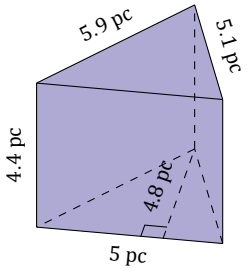
Volume is equal to the Area of the Base $\times$ the Prism Length $= 0.5 \times b \times h \times l$

Surface Area is equal to the Perimeter of the Base $\times$ the Prism Length + Twice the Area of the Base $= (P \times l) + (b \times h)$

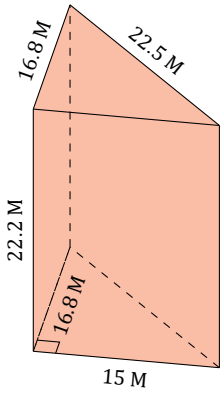
1.



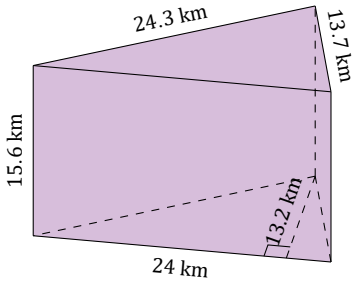
2.



3.



4.



Triangular Prisms (E) Answers

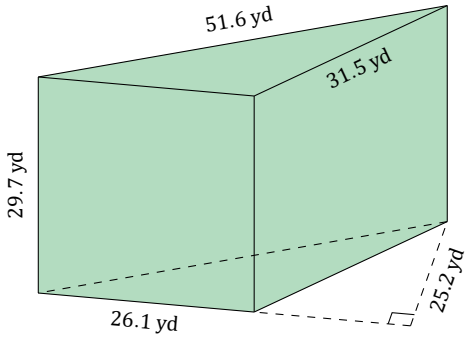
Name: _____ Date: _____

Calculate the volume and surface area of each triangular prism.

Volume is equal to the Area of the Base $\times$ the Prism Length $= 0.5 \times b \times h \times l$

Surface Area is equal to the Perimeter of the Base $\times$ the Prism Length + Twice the Area of the Base $= (P \times l) + (b \times h)$

1.



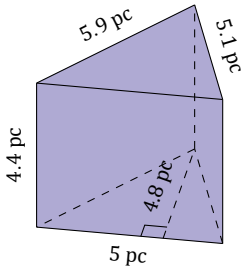
$V = 0.5 \times 26.1 \times 25.2 \times 29.7$

$V = 9767.142 \text{ yd}^3$

$SA = ((26.1 + 31.5 + 51.6) \times 29.7) + (26.1 \times 25.2)$

$SA = 3900.96 \text{ yd}^2$

2.



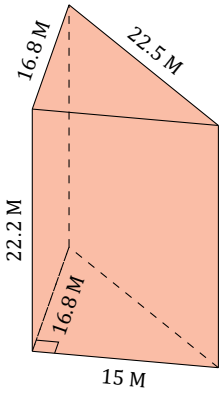
$V = 0.5 \times 5 \times 4.8 \times 4.4$

$V = 52.8 \text{ pc}^3$

$SA = ((5 + 5.1 + 5.9) \times 4.4) + (5 \times 4.8)$

$SA = 94.4 \text{ pc}^2$

3.



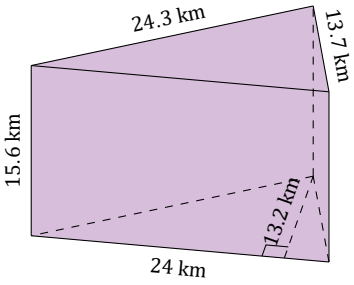
$V = 0.5 \times 15 \times 16.8 \times 22.2$

$V = 2797.2 \text{ M}^3$

$SA = ((15 + 22.5 + 16.8) \times 22.2) + (15 \times 16.8)$

$SA = 1457.46 \text{ M}^2$

4.



$V = 0.5 \times 24 \times 13.2 \times 15.6$

$V = 2471.04 \text{ km}^3$

$SA = ((24 + 13.7 + 24.3) \times 15.6) + (24 \times 13.2)$

$SA = 1284 \text{ km}^2$