Triangular Prisms (A)

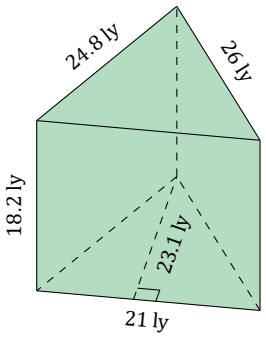
Name: _____ Date: _____

Calculate the volume and surface area of each triangular prism.

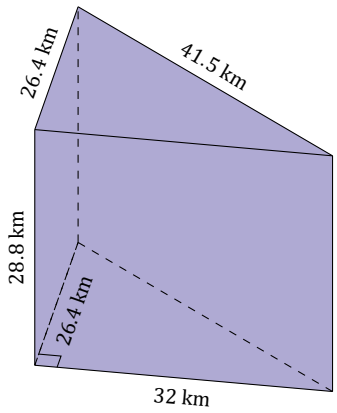
Volume is equal to the Area of the Base $\times$ the Prism Length $= 0.5 \times b \times h \times l$

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

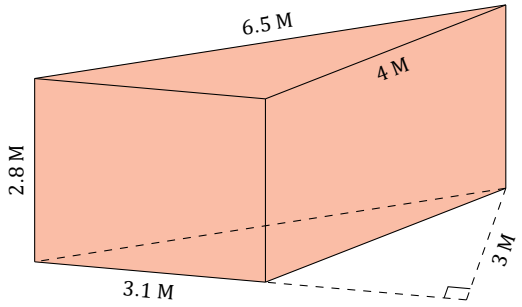
1.



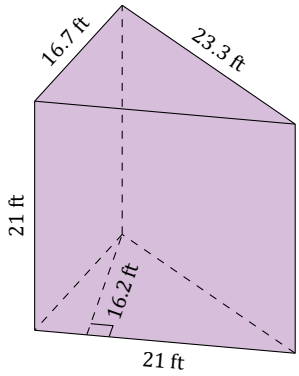
2.



3.



4.



Triangular Prisms (A) Answers

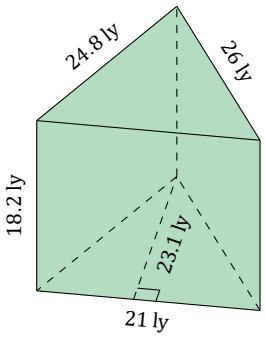
Name: _____ Date: _____

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.



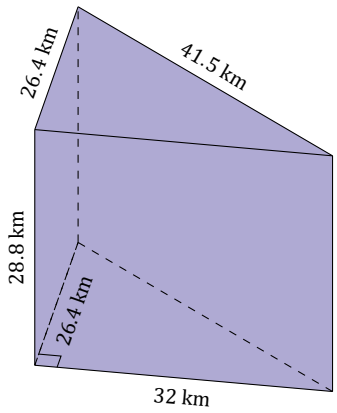
$V = 0.5 \times 21 \times 23.1 \times 18.2$

$V = 4414.41 \text{ ly}^3$

$SA = ((21 + 26 + 24.8) \times 18.2) + (21 \times 23.1)$

$SA = 1791.86 \text{ ly}^2$

2.



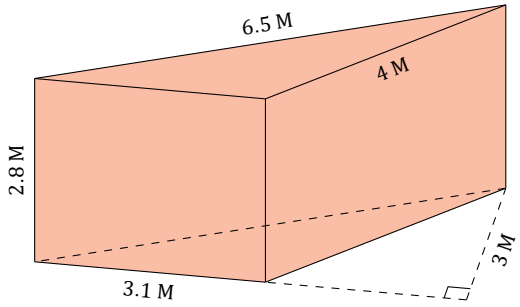
$V = 0.5 \times 32 \times 26.4 \times 28.8$

$V = 12{,}165.12 \text{ km}^3$

$SA = ((32 + 41.5 + 26.4) \times 28.8) + (32 \times 26.4)$

$SA = 3721.92 \text{ km}^2$

3.



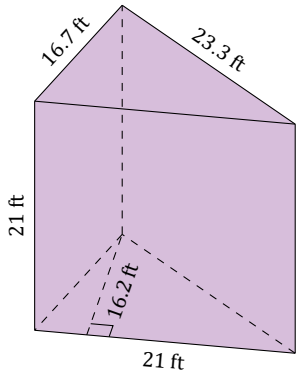
$V = 0.5 \times 3.1 \times 3 \times 2.8$

$V = 13.02 \text{ M}^3$

$SA = ((3.1 + 4 + 6.5) \times 2.8) + (3.1 \times 3)$

$SA = 47.38 \text{ M}^2$

4.



$V = 0.5 \times 21 \times 16.2 \times 21$

$V = 3572.1 \text{ ft}^3$

$SA = ((21 + 23.3 + 16.7) \times 21) + (21 \times 16.2)$

$SA = 1621.2 \text{ ft}^2$