Triangular Prisms (A)

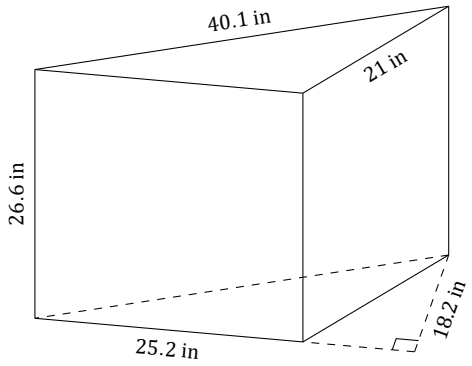
Name: _____ Date: _____

Calculate the volume and surface area of each triangular prism.

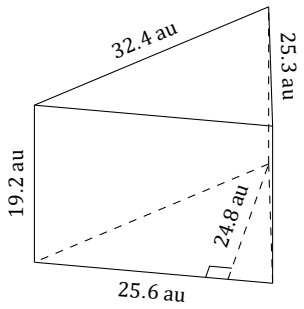
Volume is equal to the Area of the Base $\times$ the Prism Length $= 0.5 \times b \times h \times l$

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

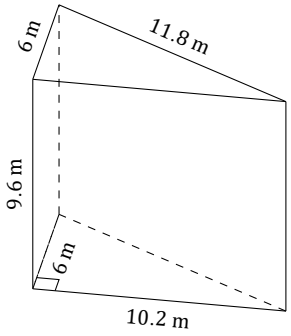
1.



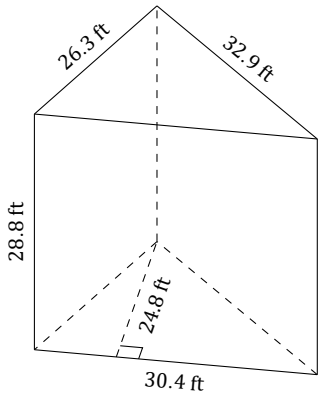
2.



3.



4.



Triangular Prisms (A) Answers

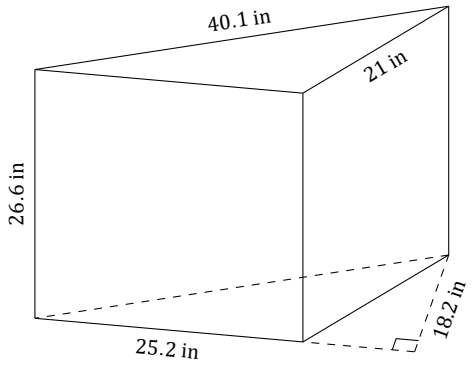
Name: _____ Date: _____

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.



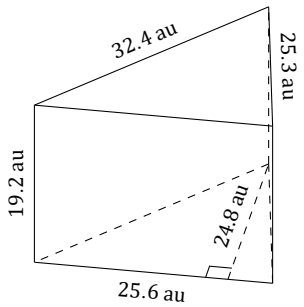
$V = 0.5 \times 25.2 \times 18.2 \times 26.6$

$V = 6099.912 \text{ in}^3$

$SA = ((25.2 + 21 + 40.1) \times 26.6) + (25.2 \times 18.2)$

$SA = 2754.22 \text{ in}^2$

2.



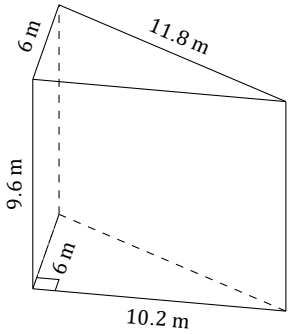
$V = 0.5 \times 25.6 \times 24.8 \times 19.2$

$V = 6094.848 \text{ au}^3$

$SA = ((25.6 + 25.3 + 32.4) \times 19.2) + (25.6 \times 24.8)$

$SA = 2234.24 \text{ au}^2$

3.



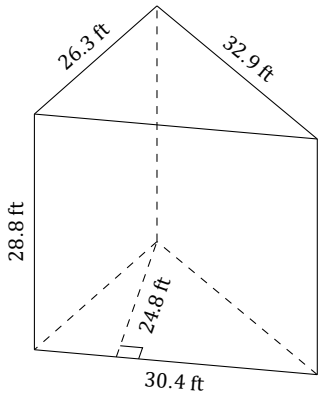
$V = 0.5 \times 10.2 \times 6 \times 9.6$

$V = 293.76 \text{ m}^3$

$SA = ((10.2 + 11.8 + 6) \times 9.6) + (10.2 \times 6)$

$SA = 330 \text{ m}^2$

4.



$V = 0.5 \times 30.4 \times 24.8 \times 28.8$

$V = 10{,}856.448 \text{ ft}^3$

$SA = ((30.4 + 32.9 + 26.3) \times 28.8) + (30.4 \times 24.8)$

$SA = 3334.4 \text{ ft}^2$