Triangular Prisms (E)

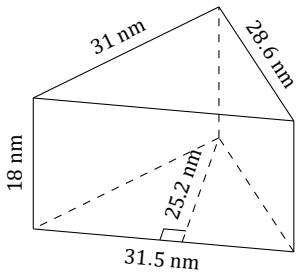
Name: _____ Date: _____

Calculate the volume and surface area of each triangular prism.

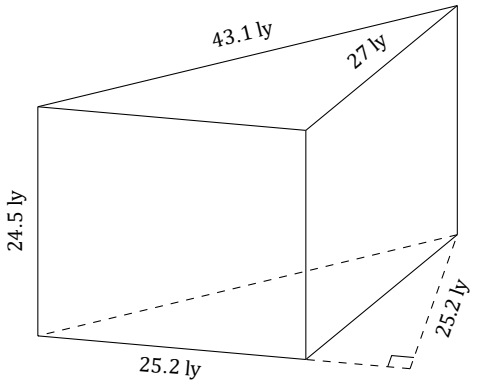
Volume is equal to the Area of the Base $\times$ the Prism Length $= 0.5 \times b \times h \times l$

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

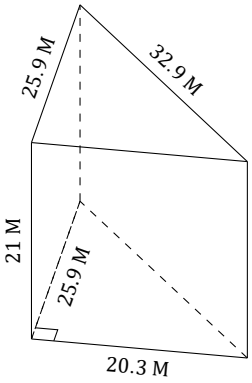
1.



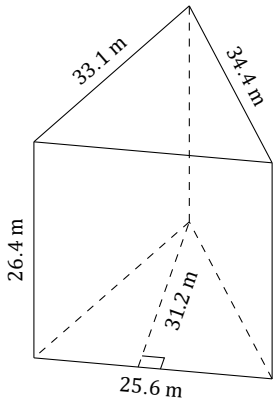
2.



3.



4.



Triangular Prisms (E) Answers

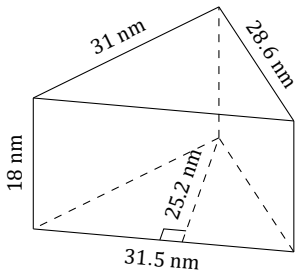
Name: _____ Date: _____

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.



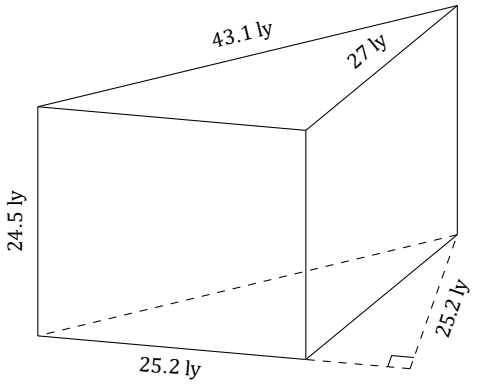
$V = 0.5 \times 31.5 \times 25.2 \times 18$

$V = 7144.2 \text{ nm}^3$

$SA = ((31.5 + 28.6 + 31) \times 18) + (31.5 \times 25.2)$

$SA = 2433.6 \text{ nm}^2$

2.



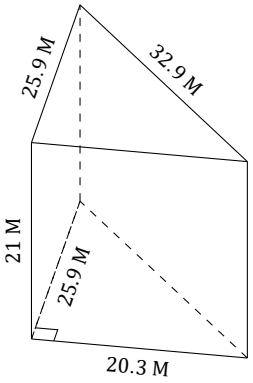
$V = 0.5 \times 25.2 \times 25.2 \times 24.5$

$V = 7779.24 \text{ ly}^3$

$SA = ((25.2 + 27 + 43.1) \times 24.5) + (25.2 \times 25.2)$

$SA = 2969.89 \text{ ly}^2$

3.



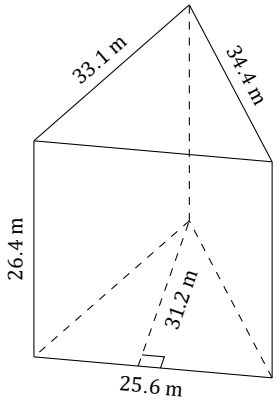
$V = 0.5 \times 20.3 \times 25.9 \times 21$

$V = 5520.585 \text{ M}^3$

$SA = ((20.3 + 32.9 + 25.9) \times 21) + (20.3 \times 25.9)$

$SA = 2186.87 \text{ M}^2$

4.



$V = 0.5 \times 25.6 \times 31.2 \times 26.4$

$V = 10{,}543.104 \text{ m}^3$

$SA = ((25.6 + 34.4 + 33.1) \times 26.4) + (25.6 \times 31.2)$

$SA = 3256.56 \text{ m}^2$