

Triangular Prisms (J)

Name: _____

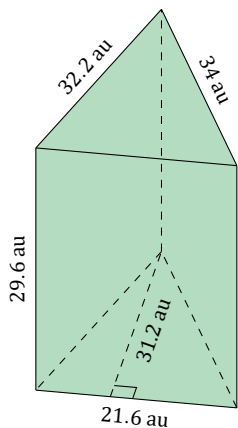
Date: _____

Calculate the volume and surface area of each triangular prism.

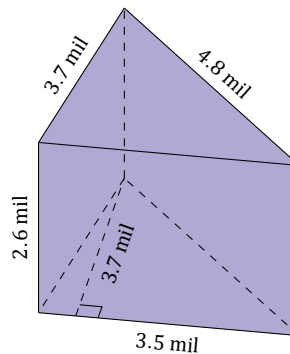
Volume is equal to the Area of the Base \times the Prism Length = $0.5 \times b \times h \times l$

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

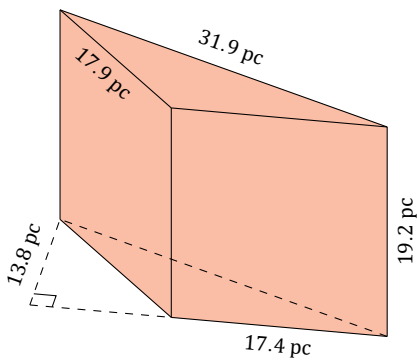
1.



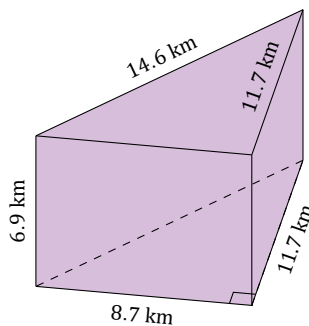
2.



3.



4.



Triangular Prisms (J) Answers

Name: _____

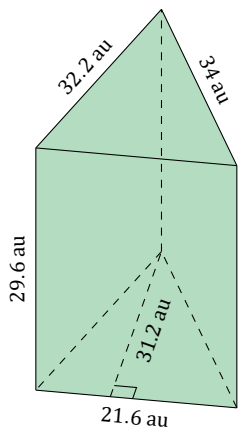
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1.



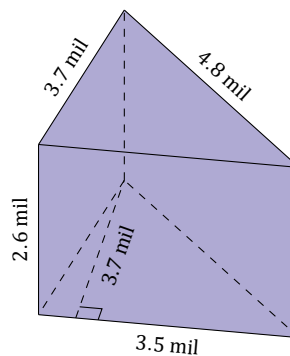
$$V = 0.5 \times 21.6 \times 31.2 \times 29.6$$

$$V = 9974.016 \text{ au}^3$$

$$SA = ((21.6 + 34 + 32.2) \times 29.6) + (21.6 \times 31.2)$$

$$SA = 3272.8 \text{ au}^2$$

2.



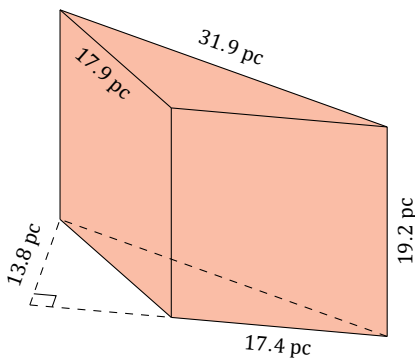
$$V = 0.5 \times 3.5 \times 3.7 \times 2.6$$

$$V = 16.835 \text{ mil}^3$$

$$SA = ((3.5 + 4.8 + 3.7) \times 2.6) + (3.5 \times 3.7)$$

$$SA = 44.15 \text{ mil}^2$$

3.



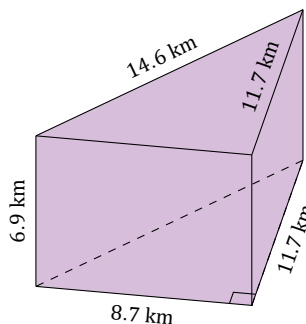
$$V = 0.5 \times 17.4 \times 13.8 \times 19.2$$

$$V = 2305.152 \text{ pc}^3$$

$$SA = ((17.4 + 31.9 + 17.9) \times 19.2) + (17.4 \times 13.8)$$

$$SA = 1530.36 \text{ pc}^2$$

4.



$$V = 0.5 \times 8.7 \times 11.7 \times 6.9$$

$$V = 351.1755 \text{ km}^3$$

$$SA = ((8.7 + 11.7 + 14.6) \times 6.9) + (8.7 \times 11.7)$$

$$SA = 343.29 \text{ km}^2$$