

TOPIC/OBJECTIVE:

Surface Area & Volume

NAME:

CONTENT/CLASS:

Geo.

CLASS/PERIOD:

8

DATE:

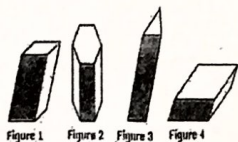
9/18/15

ESSENTIAL QUESTION:

How do I find the surface area and volume of prisms?

QUESTIONS:

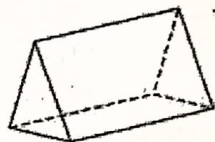
NOTES:



Prism

a solid geometric object whose two end faces are similar, equal, and parallel figures, and whose sides are parallelograms.

Triangular Prism



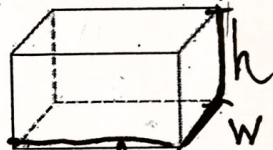
- 5 faces
- 2 triangular bases
- 3 rectangular faces

(add)

S.A. = Sum of areas of all sides

V = (area of triangle)(height)

Rectangular Prism

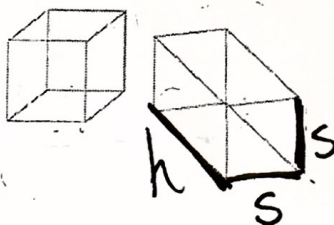


- 6 faces
- 2 rectangular bases
- 4 rectangular faces

S.A. = 2(lw + wh + lh)

V = lwh

Square Prism



S.A. = 2s² + 4sh

V = s² · h

S = side length of a square

SUMMARY:



CONTENT/CLASS:

CLASS/PERIOD:

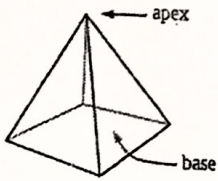
DATE:

ESSENTIAL QUESTION:

How do I find the surface area and volume of pyramids?

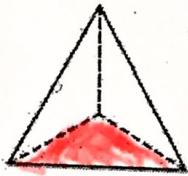
QUESTIONS:

NOTES:



Pyramid

A solid object whose base is a polygon (a straight-sided flat shape) and the sides are triangles which meet at the top (the apex).



Triangular Pyramid

- 4 faces
- 1 triangular base
- 3 triangular faces

(add)

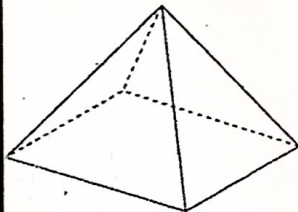
$$S.A. = \text{Sum of areas of all sides}$$

$$V = \frac{1}{3} (\text{area of base triangle}) (\text{height})$$

OR

$$V = \frac{1}{3} (\text{area of base triangle}) (\text{height})$$

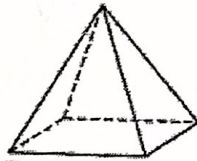
Rectangular Pyramid



$$S.A. = \text{Sum of all areas of all sides}$$

$$V = \frac{1}{3} (\text{area of rectangle}) (\text{height})$$

Square Pyramid



- 5 faces
- 1 square base
- 4 triangular faces

$$S.A. = \text{Sum of all the areas of all sides}$$

$$V = \frac{1}{3} (\text{area of the square}) (\text{height})$$

SUMMARY: