

Name:

key

Date:

Period:

HW #11-12

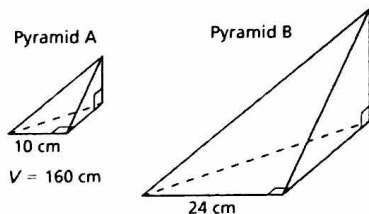
1. A pyramid with a square base has a volume of 119.07 m^3 and a height of 9 m. Find the side length of the square base.

6.3 m.

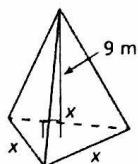
2. A pyramid with a hexagonal base has a volume of about 1082.54 in^3 and a base area of about 259.81 in^2 . Find the height of the pyramid.

12.5 in

3. The pyramids are similar. Find the volume of pyramid B.

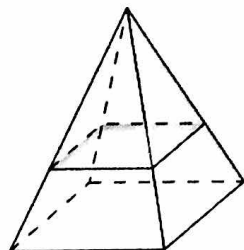
 2211.84 cm^3

4. The volume of the pyramid shown is $48\sqrt{3} \text{ m}^3$. Find the value of x .



8

5. A right square pyramid has a base with a perimeter of 36 cm and a height of 12 cm. One-third of the distance from the base, the pyramid is cut by a plane parallel to its base. What is the volume of the top pyramid?

 96 cm^3

6. Find the volume and surface area of a regular octahedron with a side length of 10 cm.

$$V = \frac{1000\sqrt{2}}{3} \text{ cm}^3$$

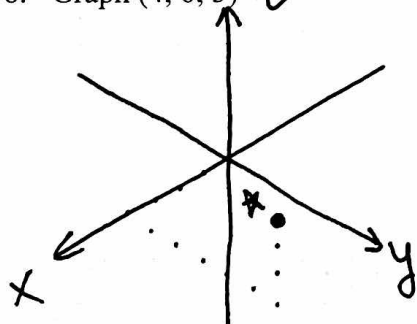
$$SA = 200\sqrt{3} \text{ cm}^2$$

7. Find the volume and surface area of a regular tetrahedron with a side length 10 cm.

$$V = \frac{250\sqrt{2}}{3} \text{ cm}^3$$

$$SA = 100\sqrt{3} \text{ cm}^2$$

8. Graph $(4, 6, 3)$



9. Find the distance between $(2, 3, 7)$ and $(9, 10, 10)$

$$\sqrt{107}$$

10. Find the midpoint of the segment whose endpoints are $(2, 5, 3)$ and $(8, 8, 10)$

$$(5, 6.5, 6.5)$$

11. Find the endpoint of the segment whose midpoint is $(6.5, 9, 12.5)$ and with one endpoint at $(9, 12, 15)$.

$$(4, 6, 10)$$