

Name

Date

Period

HW #11-13: Test Review

1. Find the volume of the torpedo.



$$138\pi$$

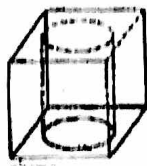
2. Find the slant height of a regular square pyramid with base perimeter 32 ft and surface area
- 256 ft^2
- .

$$12\text{ ft}$$

3. Find the volume of a cylinder with surface area
- 150π
- and height 10.

$$250\pi$$

4. An ice cube manufacturer makes ice cubes with holes in them as shown. Each cube is 4 cm on a side and the hole is 2 cm in diameter.



- a. What is the surface area of one ice cube?

$$\approx 114.85\text{ cm}^2$$

- b. What is the volume of one ice cube?

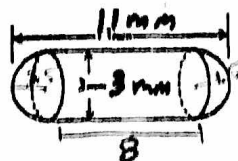
$$\approx 51.43\text{ cm}^3$$

5. Find the surface area of the right frustum.



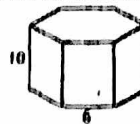
$$351\pi$$

6. A cold capsule is 11 mm long and 3 mm in diameter as shown. Find the volume of medicine it contains.



$$\frac{45\pi}{2}\text{ mm}^3$$

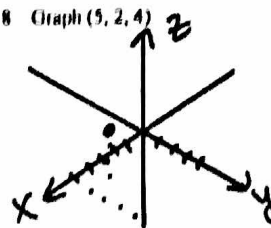
7. Find the volume and surface area of the regular hexagonal right prism.



$$\text{vol} = 540\sqrt{3}$$

$$\text{SA} = 360 + 108\sqrt{3}$$

8. Graph
- $(5, 2, 4)$
- .



sorry graph lines
are bad i

9. Find the midpoint of and distance between
- $(-6, 3, -2)$
- and
- $(7, -5, 3)$
- .

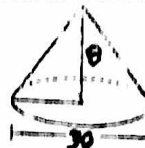
$$\text{mdpt } (0.5, -1, 0.5) \quad \text{dist} = \sqrt{258}$$

10. Find the surface area of the right cylinder.



$$66\pi$$

11. Find the surface area of the cone.



$$480\pi$$

12. Find the surface area and volume of a tetrahedron with edge 4.

$$\text{SA} = 16\sqrt{3} \quad \text{vol} = \frac{16\sqrt{2}}{3}$$

13. Find the surface area and volume of an octahedron with edge 6.

$$SA = 72\sqrt{3}$$

$$Vol = 72\sqrt{2}$$

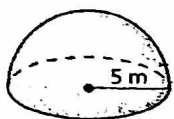
14. Find the volume of a square pyramid with slant height 17 and base edge 16

$$1280$$

15. Find the volume of a cone with slant height 15 and diameter 18

$$324\pi$$

16. Find the surface area of the hemisphere.

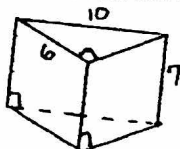


$$75\pi \text{ m}^2$$

17. Find the volume of the sphere that has surface area 484π

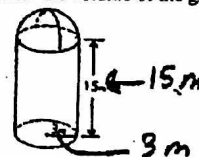
$$\frac{5324\pi}{3}$$

18. Find the surface area of the figure.



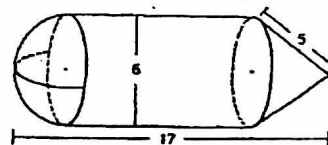
$$216$$

- * 19. Find the volume of the grain silo.



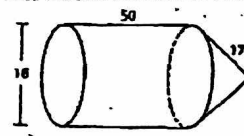
$$Vol = 153\pi$$

- * 20. Find the surface area of the torpedo.



$$SA = 93\pi$$

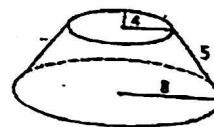
21. Find the surface area and volume of the figure.



$$SA = 1000\pi$$

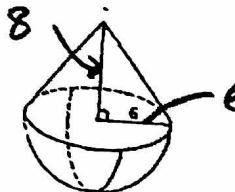
$$Vol = 3520\pi$$

- * 22. Find the volume of the frustum.



$$Vol = 112\pi$$

- * 23. Find the volume and surface area of the figure.



$$Vol = 240\pi$$

$$SA = 132$$

*yes, these are on HW #11-11
oops!