Remember to study all homework as some concepts are not covered on here.
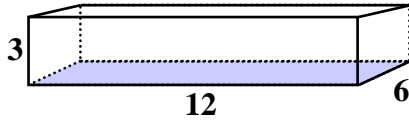
Pre AP Geometry
Ch 3 & 4 Review

Name _____

Pd____Date_____

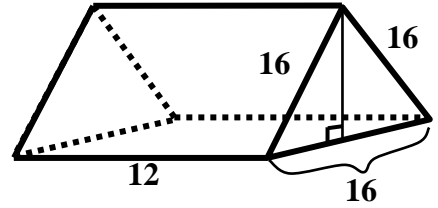**Leave answers in terms of π or rounded to thousandths.**

1.

3   12   6

LA = _____

SA = _____   V = _____

2.

16   16   16
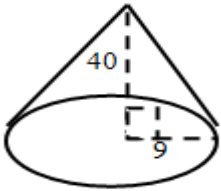
12   16

LA = _____

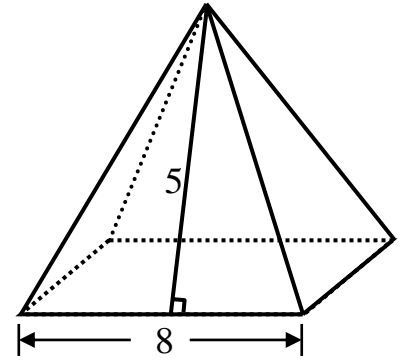SA = _____   V = _____

3.

40   9

LA = _____

SA = _____

V=_____
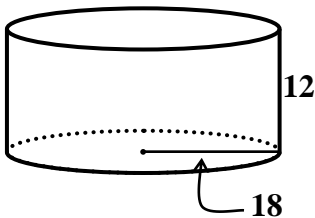
4. Square Pyramid

5

8

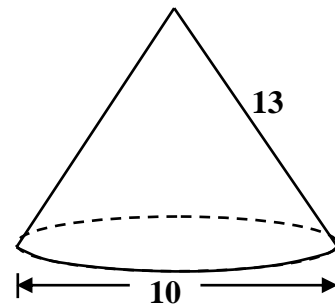LA = _____

SA = _____

V = _____

5.

12

18

LA = _____

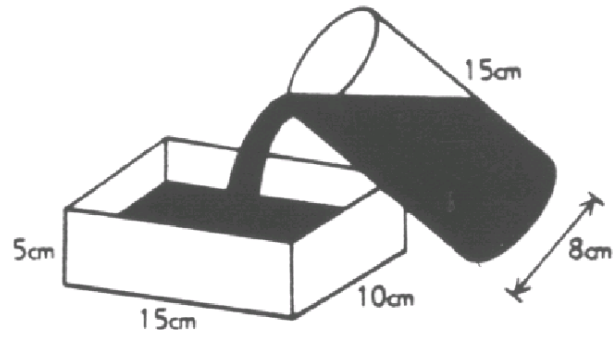SA = _____

V = _____

6.

13

10

LA = _____

SA = _____

V = _____

7. The cylindrical glass is full of water, which is poured into the rectangular pan. Will the pan overflow?
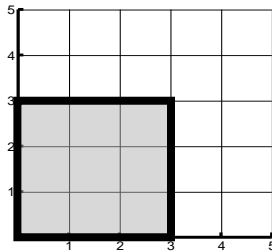Provide mathematical evidence of your answer.

15cm

5cm

8cm

10cm

15cm

8. A paint roller has a diameter of 3″ and a length of 8″. How much paint can be spread on a wall in 35
revolutions?

9. Find the LA, SA and V of the figure formed if the square below is rotated 360° about the x-axis. Leave
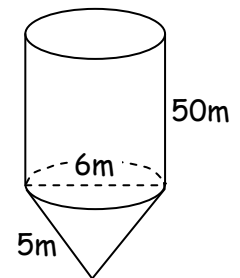answers in terms of π.

SA_____

V_____

10. A pyramid has volume of 108 cu ft and a base area of 27 cu ft. Find its height.

11. Two similar pyramids have lateral areas 8 ft^2 and 18 ft^2. The volume of the larger pyramid is 108 ft^3.

Find the volume of the smaller pyramid

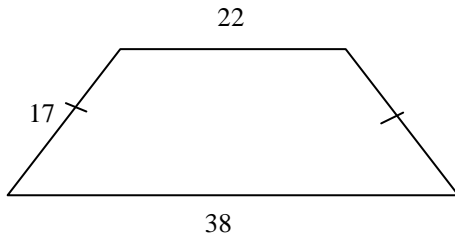12. The total surface area of a cube is 384 mm^2, what is its volume?

13. A well, with a cylindrical wall of 50 m. and a diameter of 6 m., is dug.
The bottom of the well is tapered to a cone with slant height of 5 m.
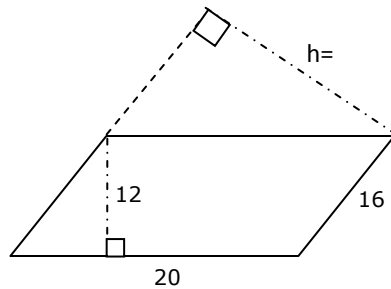Find the volume of water that this well could hold.

50m

6m

5m

14. Find the area of a regular triangle with side 18.

15. The length and width of a rectangle are in a ratio of 2:3. The area is 384. Find the length and width.

16. An isosceles trapezoid has bases 12 and 28. The area is 300. Find the perimeter of the trapezoid.

17. Find the area of a rhombus with one diagonal 8 and side 5.

18. The area of a rectangle is 180. The height is twice the base. Find the perimeter.

19. The area of a square is 225 sq. ft. Find the area of a rectangle with the same perimeter whose base is 6 ft.
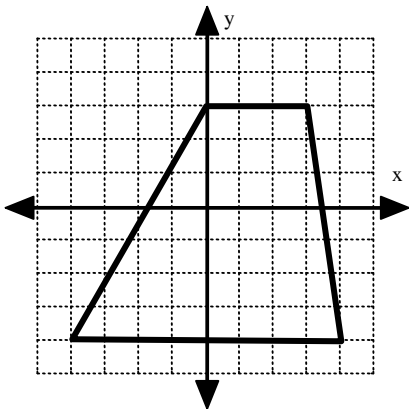
20. Find the area of the trapezoid.

22

17

38

21. Find the area of the parallelogram. Then find the missing height.

h=

12

16

20

22. The floor of a patio is a regular octagon. Each side of the octagon is 8 feet and the area of the floor is 309 square feet. You want to build a smaller scale model patio in the same shape as the original patio. The smaller patio will have a perimeter of 24 inches. What will be the area of the smaller patio?

23. Find the area of the following figure.

y

x

24. Find the area of the shaded region.

18 m

16 m

20 m