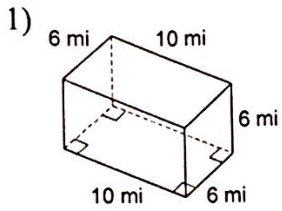


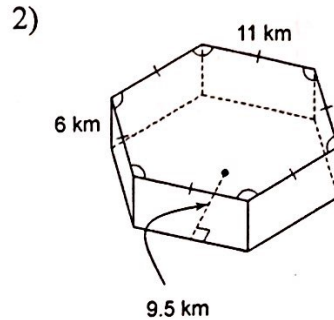
Unit 4 Test REVIEW - Geometric Modeling

Date _____ Period _____

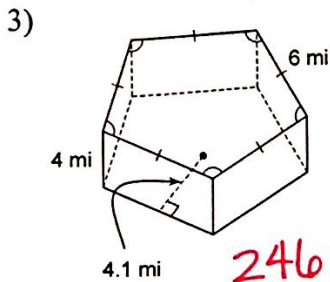
Name each figure and find the volume. Round your answers to the nearest hundredth.



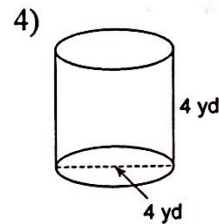
$$360 \text{ mi}^3$$



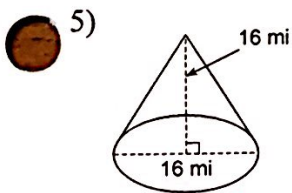
$$1881 \text{ km}^3$$



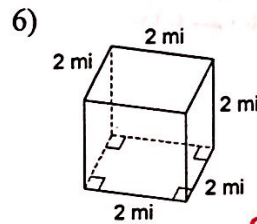
$$246 \text{ mi}^3$$



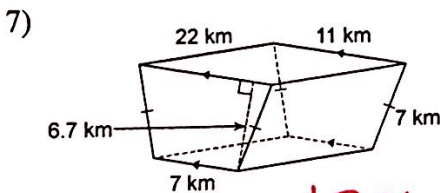
$$50.27 \text{ yd}^3$$



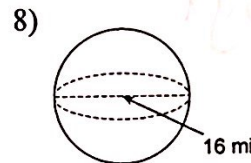
$$1072.33 \text{ m}^3$$



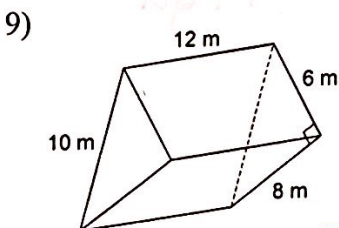
$$8 \text{ mi}^3$$



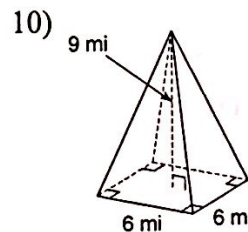
$$1326.6 \text{ km}^3$$



$$2144.66 \text{ mi}^3$$

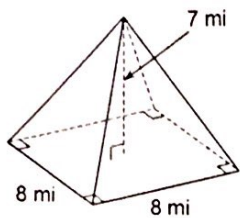


$$288 \text{ m}^3$$



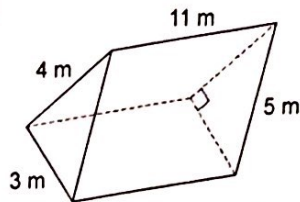
$$108 \text{ mi}^3$$

11)



$$149.33 \text{ mi}^3$$

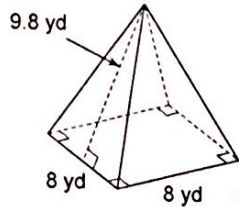
12)



$$66 \text{ m}^3$$

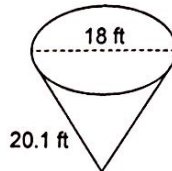
Name each figure then find the surface area. Round your answers to the nearest hundredth.

13)



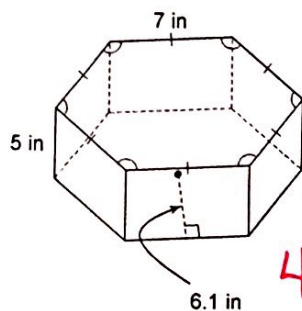
$$220.8 \text{ yd}^2$$

14)



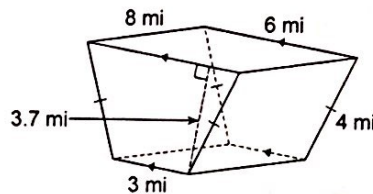
$$822.78 \text{ ft}^2$$

15)



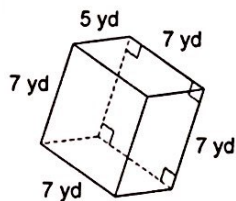
$$466.2 \text{ in}^2$$

16)



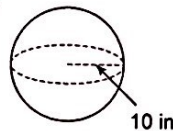
$$169.3 \text{ mi}^2$$

17)



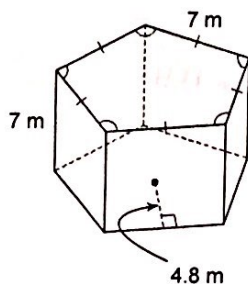
$$238 \text{ yd}^2$$

18)



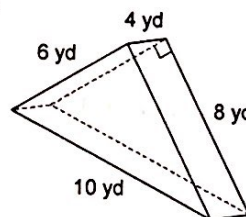
$$1256.64 \text{ in}^2$$

19)



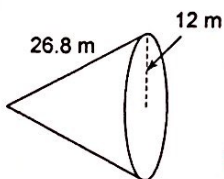
$$413 \text{ m}^2$$

20)



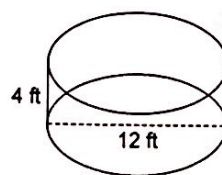
$$144 \text{ yd}^2$$

21)



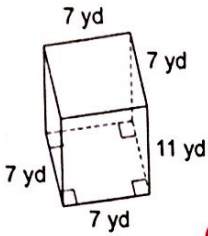
$$1462.73 \text{ m}^2$$

22)



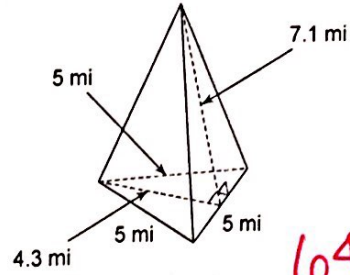
$$376.99 \text{ ft}^2$$

23)



$$406 \text{ yd}^2$$

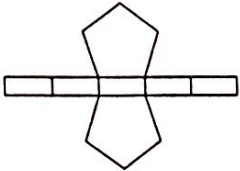
24)



$$64 \text{ mi}^2$$

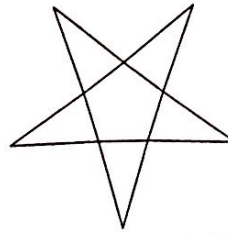
Identify each solid given its net.

25)



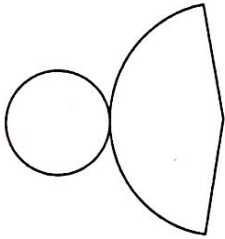
Pentagonal
Prism

26)



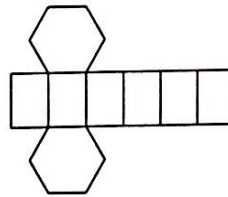
Pentagonal
Pyramid

27)



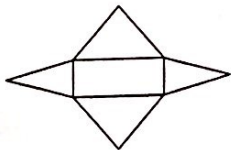
Cone

28)



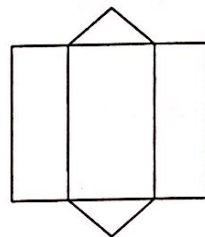
hexagonal prism

29)



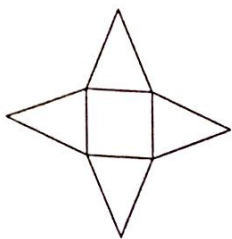
rectangular
Pyramid

30)



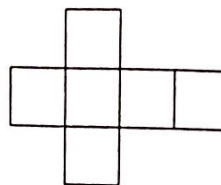
triangular prism

31)



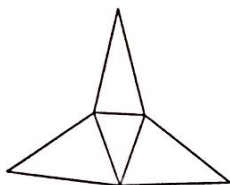
Square pyramid

32)



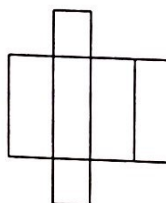
Square prism

33)



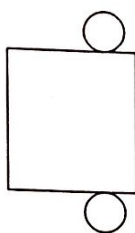
Triangular pyramid

34)



rectangular prism

35)



Cylinder

- 36) A square with area of 100 cm^2 is rotated to form a cylinder.
What is the volume of the cylinder?

$$\approx 785 \text{ cm}^3$$

- 37) Given a cone with a radius of 6 ft and a height of 12 ft, find the area of the triangle formed by a perpendicular cross-section down through the cone's center

$$36 \text{ ft}^2$$

- 38) Given the shape below, determine the 3D solid formed by rotating the 2D shape about the line given.

- a) Triangle about the y-axis

Cone

- b) Rectangle about the x-axis

cylinder

- c) Semicircle about the y-axis

sphere

Problem 1



(a)



(b)

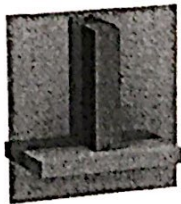


(c)



(d)

Problem 2



(a)



(b)



(c)



(d)

Problem 3



(a)



(b)



(c)



(d)

Problem 4



(a)



(b)



(c)



(d)

Problem 5



(a)



(b)



(c)



(d)

Problem 7



(a)



(b)

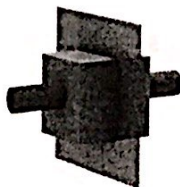


(c)



(d)

Problem 6



(a)



(b)



(c)



(d)

Problem 8



(a)



(b)

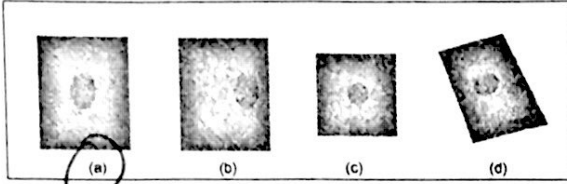
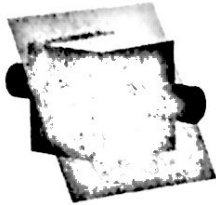


(c)

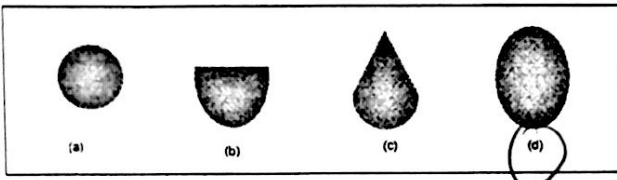


(d)

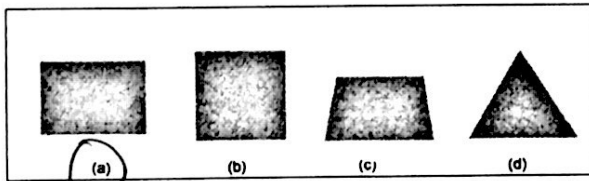
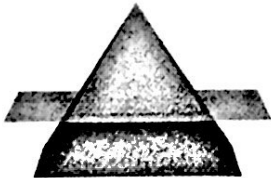
Problem 9



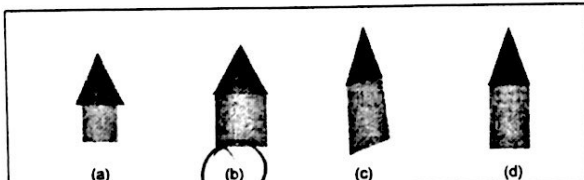
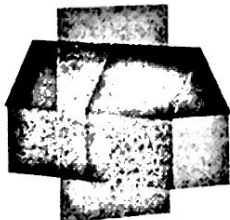
Problem 10



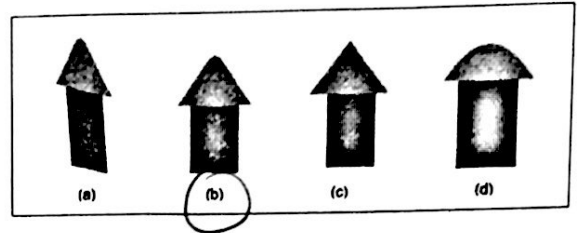
Problem 13



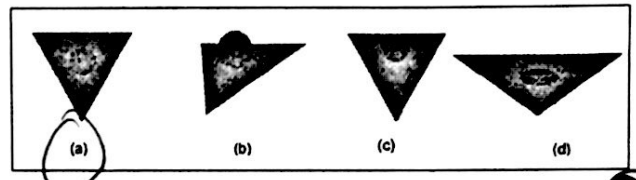
Problem 14



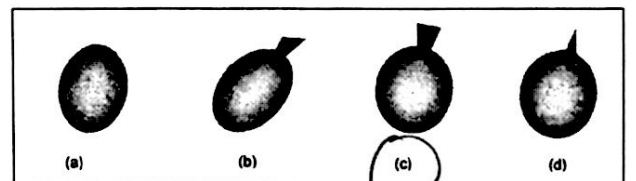
Problem 11



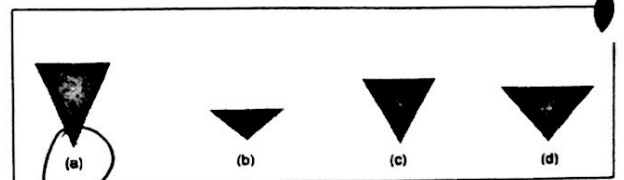
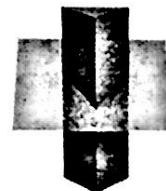
Problem 12



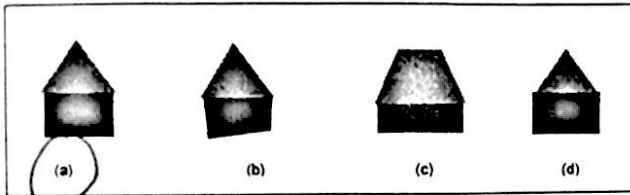
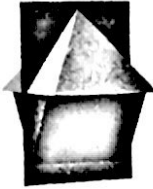
Problem 15



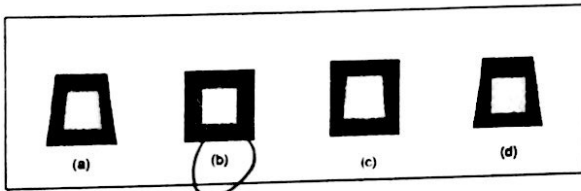
Problem 16



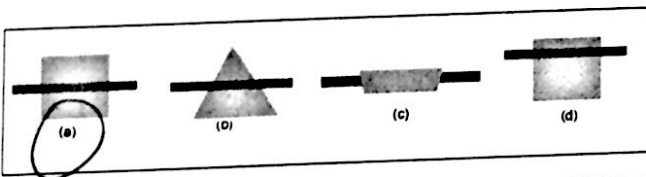
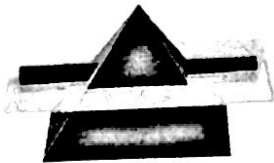
Problem 17



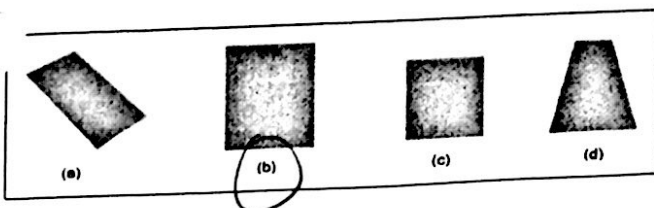
Problem 18



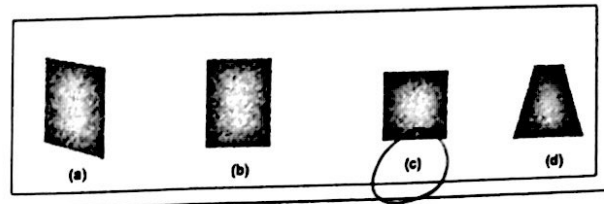
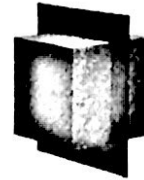
Problem 21



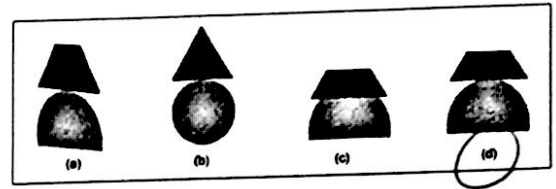
Problem 22



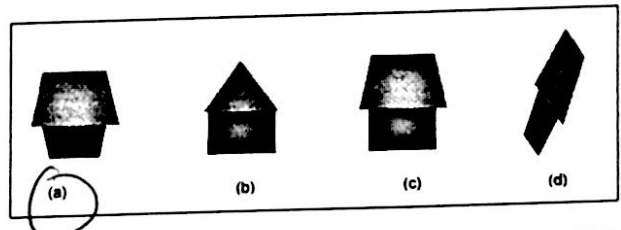
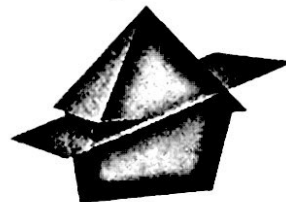
Problem 19



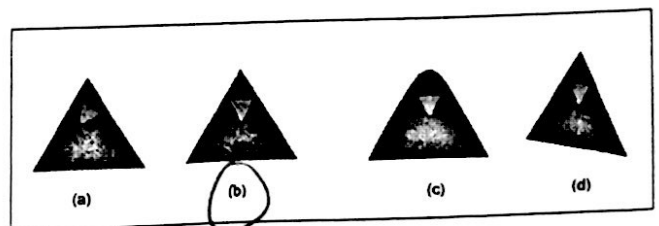
Problem 20



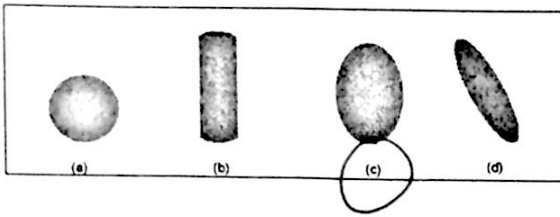
Problem 23



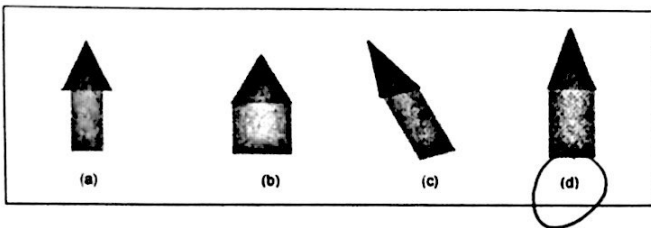
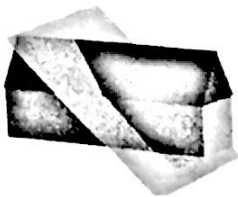
Problem 24



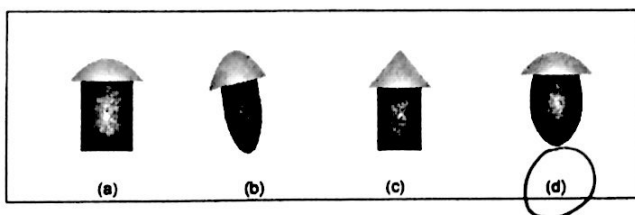
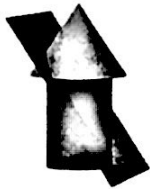
Problem 25



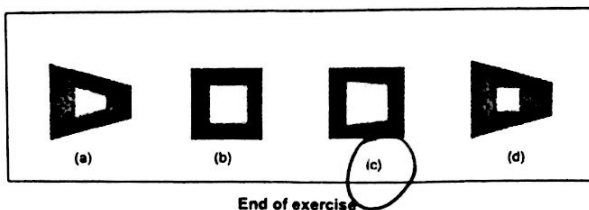
Problem 26



Problem 29

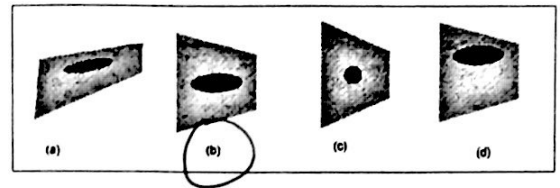
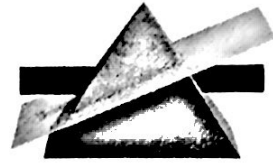


Problem 30



End of exercise

Problem 27



Problem 28

