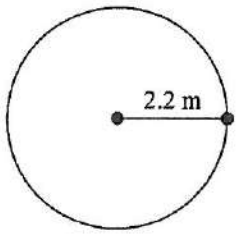
Name: _____ Class: _____ Date: _____ ID: A

Geometry B Trimester Exam Review

1. Use a translation rule to describe the translation of P that is 6 units to the left and 6 units down.

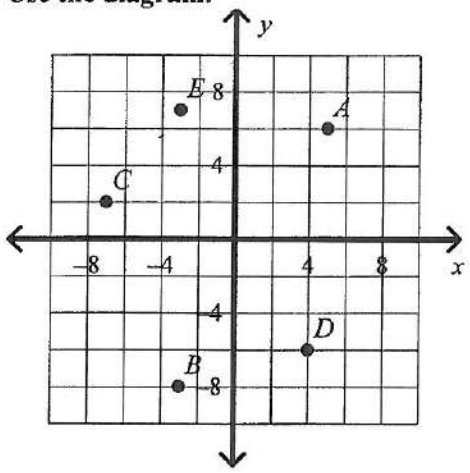
Find the area of the circle. Leave your answer in terms of π.

2.



3. Find the area of a regular hexagon with an apothem 17.3 miles long and a side 20 miles long. Round your answer to the nearest tenth.

Use the diagram.

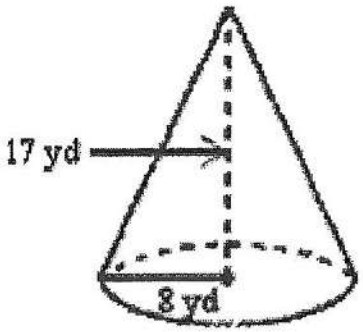


4. Find the translation rule that describes the translation $B \rightarrow E$.

Name: _____ ID: A

Find the volume of the right cone shown as a decimal rounded to the nearest tenth.

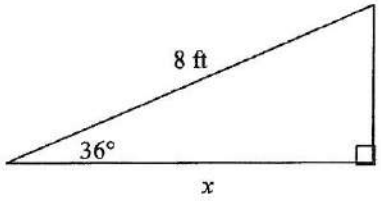
5.



Not drawn to scale

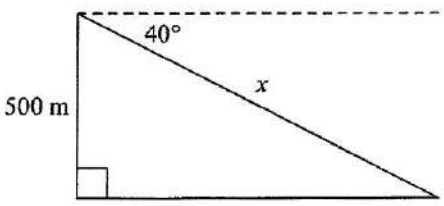
Find the value of x. Round the length to the nearest tenth.

6.



Not drawn to scale

7.

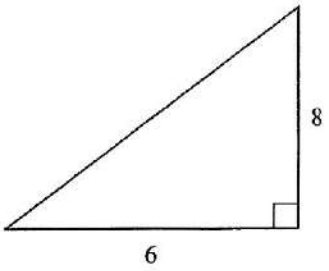


Not drawn to scale

Name: _____ ID: A

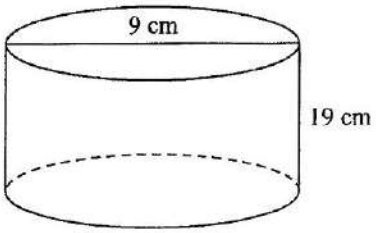
Find the length of the missing side. The triangle is not drawn to scale.

8.



Find the surface area of the cylinder in terms of π.

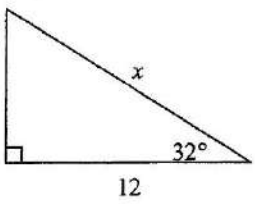
9.



Not drawn to scale

Find the value of x. Round to the nearest tenth.

10.

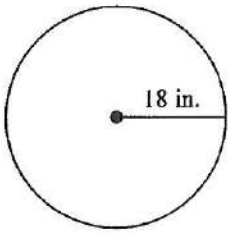


Not drawn to scale

Name: _____ ID: A

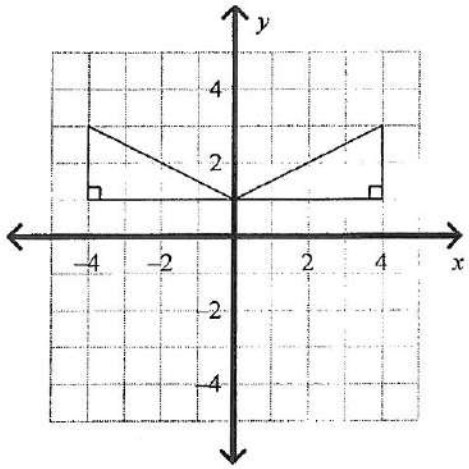
Find the circumference. Leave your answer in terms of π.

11.

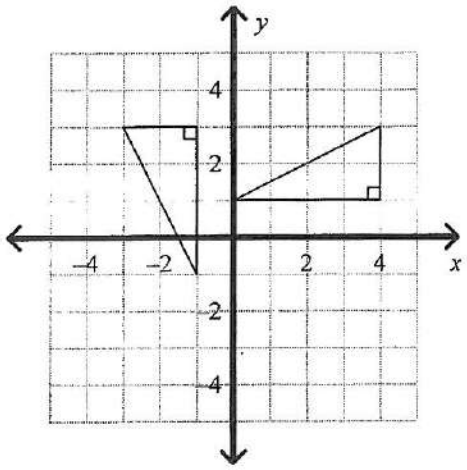


____ 12. Which graph shows a triangle and its reflection image over the x-axis?

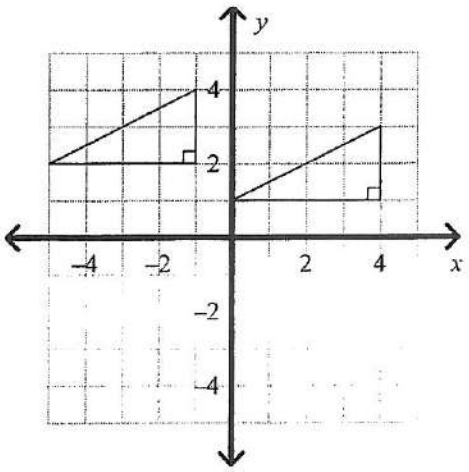
A.



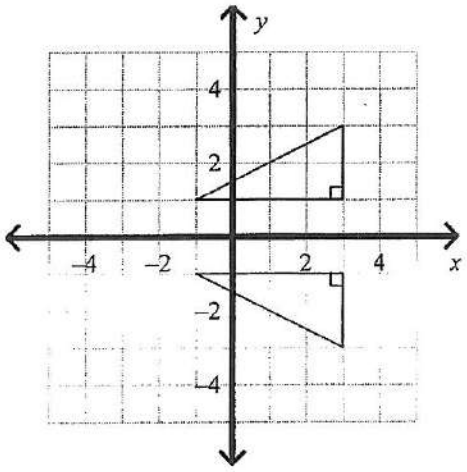
C.



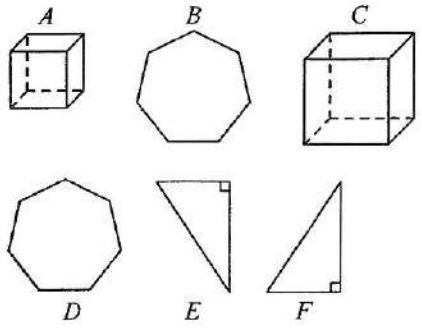
B.



D.

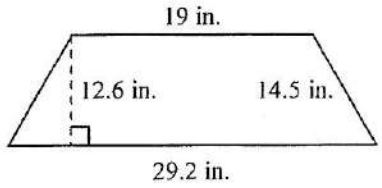


____ 13. Which figures are congruent?



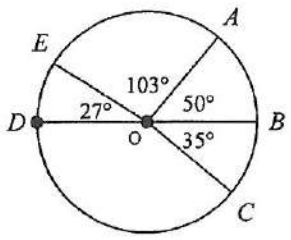
A. $B \cong D$ and $A \cong C$
B. $B \cong D$
C. $B \cong D$ and $E \cong F$
D. $B \cong D$ and $E \cong F$ and $A \cong C$

14.



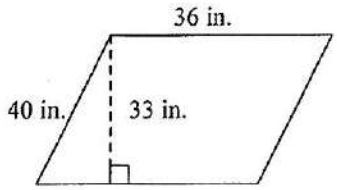
Not drawn to scale

15. Find the measure of $\overset{\frown}{CDE}$.
The figure is not drawn to scale.

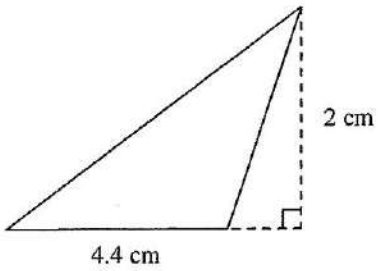


Find the area. The figure is not drawn to scale.

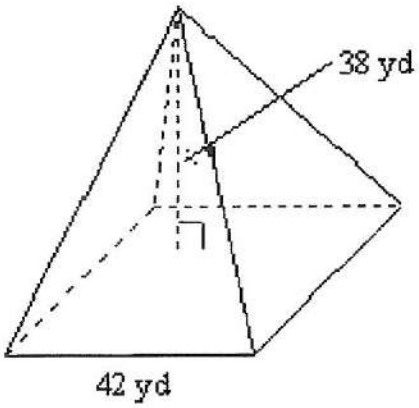
16.



17.

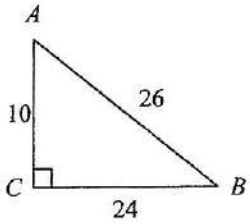


18. Find the lateral area of the square pyramid shown, to the nearest whole number.



Not drawn to scale

19. Write the ratios for sin A and cos A.



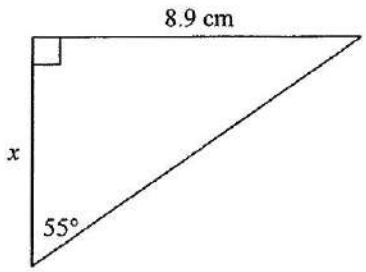
Not drawn to scale

20. A triangle has sides of lengths 24, 143, and 145. Is it a right triangle? Explain.

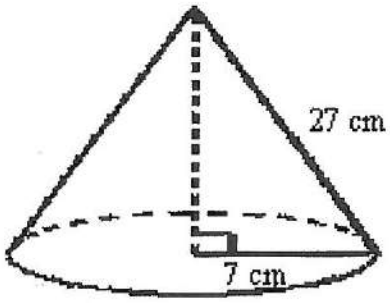
Name: _____ ID: A

Use a trigonometric ratio to find the value of x. Round your answer to the nearest tenth.

21.



22. Find the surface area of the cone to the nearest tenth.



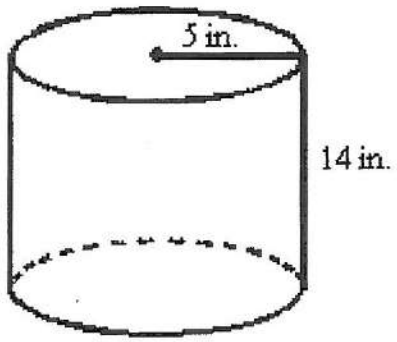
Not drawn to scale

23. If the similarity ratio of two similar solids is 3 : 14, what is the ratio of their corresponding areas? What is the ratio of their corresponding volumes?

Name: _____ ID: A

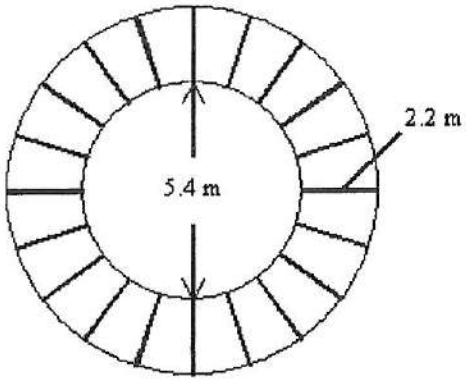
Find the volume of the cylinder in terms of π.

24.



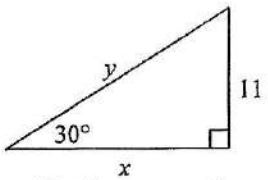
Not drawn to scale

25. The figure represents the overhead view of a deck surrounding a hot tub. What is the area of the deck? Round to the nearest tenth.



Find the value of the variable(s). If your answer is not an integer, leave it in simplest radical form.

26.

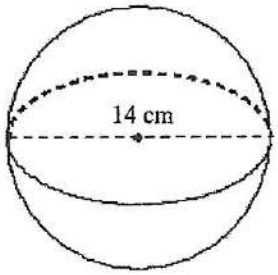


Not drawn to scale

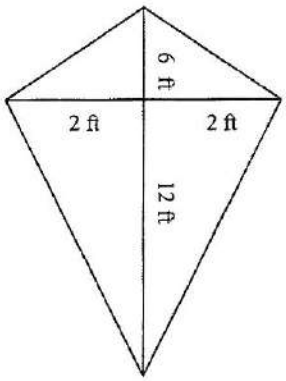
Name: _____ ID: A

Find the volume of the sphere shown. Give each answer rounded to the nearest cubic unit.

27.

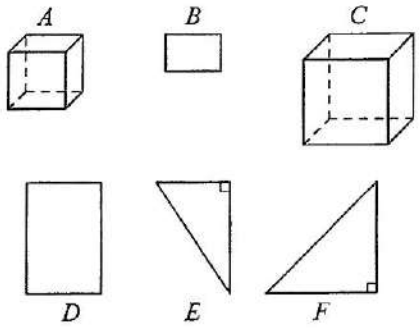


28. What is the area of the kite?



Not drawn to scale

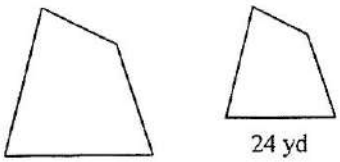
____ 29. Which figures are similar?



A. $B \sim D$ and $A \sim C$
B. $A \sim C$
C. $B \sim D$ and $E \sim F$
D. $B \sim D$ and $E \sim F$ and $A \sim C$

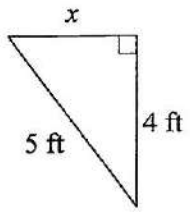
The figures are similar. Give the ratio of the perimeters and the ratio of the areas of the first figure to the second. The figures are not drawn to scale.

30.

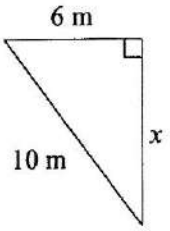


Find the missing side of each triangle. Round your answers to the nearest tenth if necessary.

31)

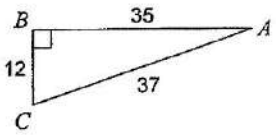


32)

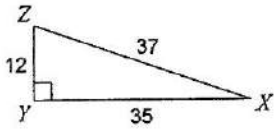


Find the value of each trigonometric ratio.

33) sin *A*

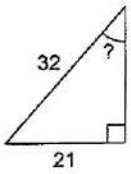


34) sin *Z*



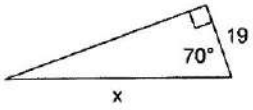
Find the measure of the indicated angle to the nearest degree.

35)



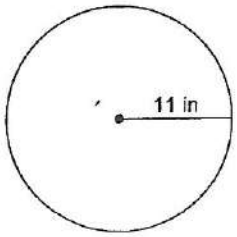
Find the missing side. Round to the nearest tenth.

36)



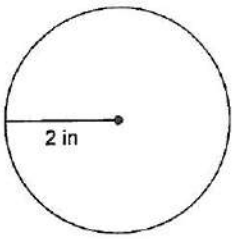
Find the area of each. Use your calculator's value of π. Round your answer to the nearest tenth.

37)



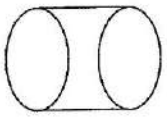
Find the circumference of each circle. Use your calculator's value of π. Round your answer to the nearest tenth.

38)

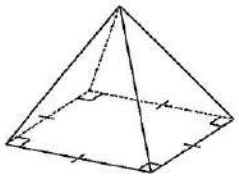


Name each figure.

39)

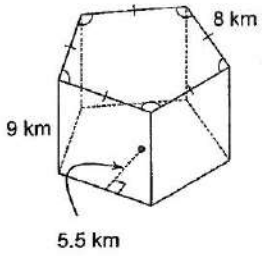


40)

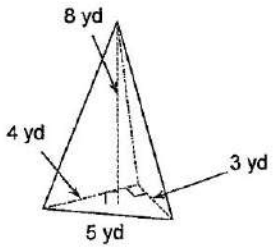


Find the volume of each figure. Round your answers to the nearest thousandth, if necessary.

41)

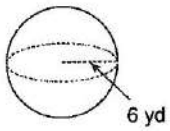


42)

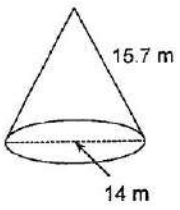


Find the surface area of each figure. Round your answers to the nearest thousandth, if necessary.

43)

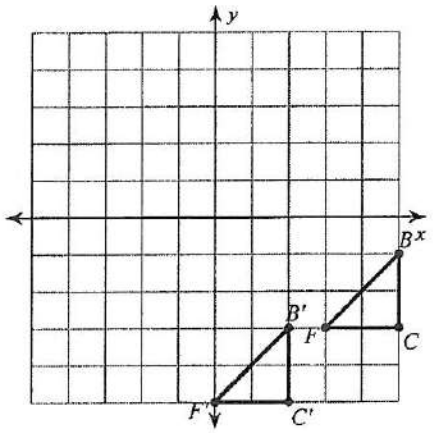


44)

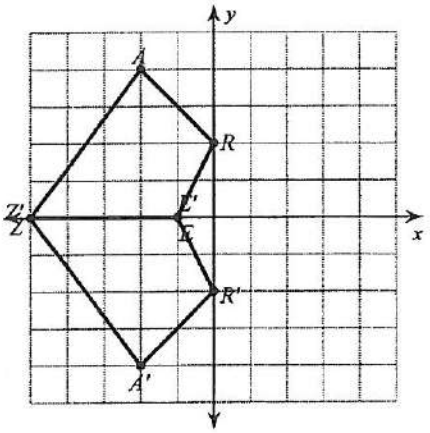


Write a rule to describe each transformation.

45)

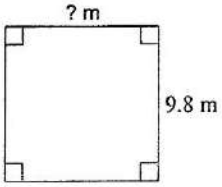


46)



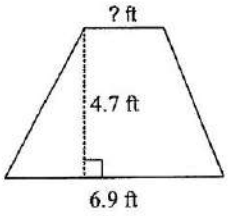
Find the missing measurement. Round your answer to the nearest tenth.

47)



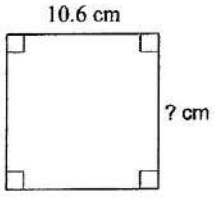
Area = 96 m²

48)



Area = 22.1 ft²

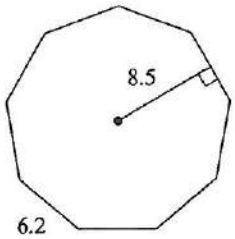
49)



Area = 113.4 cm²

Find the area of each regular polygon. Round your answer to the nearest tenth if necessary.

50)



Geometry B Trimester Exam Review
Answer Section

1. $T_{<-6,-6>}(P)$
2. 4.84π m^2
3. 1038 mi^2
4. $T_{<0,15>}(B)$
5. 1139.4 yd^3
6. 6.5 ft
7. 777.9 m
8. 10
9. 211.5π cm^2
10. 14.2
11. 36π in.
12. D
13. C
14. 303.66 in.^{2}
15. 172
16. 1188 in.^{2}
17. 4.4 cm^2
18. 3647 yd^2
19. $\sin A = \frac{24}{26}, \cos A = \frac{10}{26}$
20. yes; $24^2 + 143^2 = 145^2$
21. 6.2 cm
22. 747.7 cm^2
23. The ratio of their corresponding areas is 9 : 196.
    The ratio of their corresponding volumes is 27 : 2744.
24. 350π in.^{3}
25. 52.5 m^2
26. $x = 11\sqrt{3}, y = 22$
27. 1,437 cm^3
28. 36 ft^2
29. A
30. $\frac{9}{8}$ and $\frac{81}{64}$