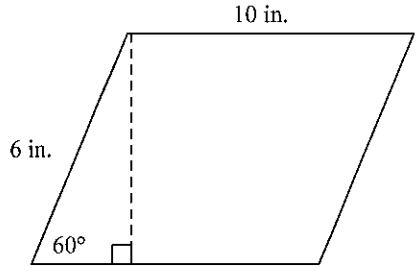
Name: _____ Class: _____ Date: _____ ID: A

ACC GEO-11.1,11.2,11.4 plus Triangle Supplement Practice Quiz

Multiple Choice
Identify the choice that best completes the statement or answers the question.
ACT: When given the sides of two sides of a triangle (a and b), and the included angle θ, the area can be found by using the formula $A = \frac{1}{2}ab\sin\theta$.

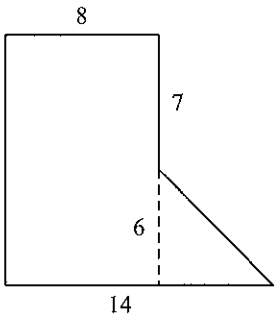
____ 1. Find the perimeter and area of the parallelogram. Round to the nearest tenth if necessary.



a. 32 in.; 52 in^2
b. 16 in.; 31.2 in^2
c. 32 in.; 31.2 in^2
d. 16 in.; 52 in^2

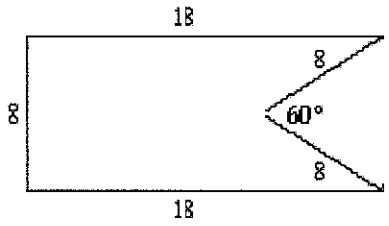
____ 2. Find the exact area of a circle with a circumference of 20π.
a. 400π
b. 100
c. 200π
d. 100π

____ 3. Find the area of the figure. Round to the nearest tenth if necessary.



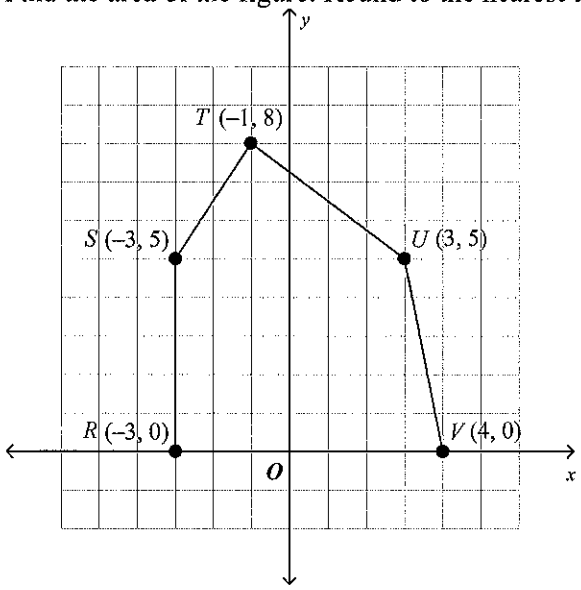
a. 122 $units^2$
b. 140 $units^2$
c. 130 $units^2$
d. 148 $units^2$

____ 4. Find the area of the figure. Round to the nearest tenth if necessary.



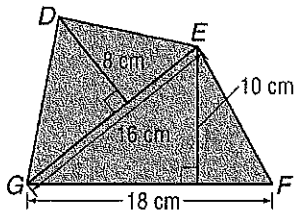
a. 116.3 units^2
b. 121.4 units^2
c. 88.6 units^2
d. 98.7 units^2

____ 5. Find the area of the figure. Round to the nearest tenth if necessary.



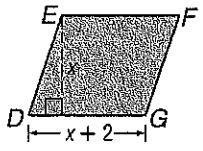
a. 41.5 units^2
b. 74 units^2
c. 50.5 units^2
d. 56.5 units^2

____ 6. Find the area of quadrilateral *DEFG*.



a. 244 cm^2
b. 218 cm^2
c. 308 cm^2
d. 154 cm^2

____ 7. The area of parallelogram *DEFG* is 143 square units. Find the lengths of the **height** and the **base**. Round to the nearest tenth.

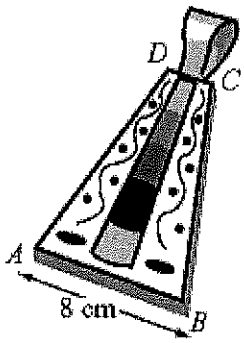


a. 8, 10
b. 47, 49
c. 11, 13
d. 70.5, 72.5

____ 8. Find the exact area of a square with a perimeter of $16\sqrt{2}$ inches.

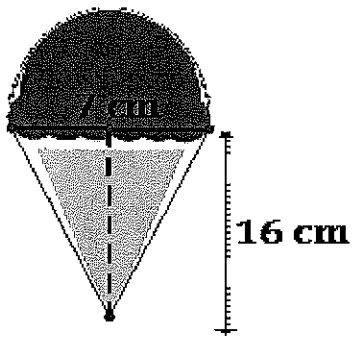
a. 32 in^2
b. 64 in^2
c. $16in^2$
d. $32\sqrt{2}in^2$

____ 9. A goldsmith designed a trapezoidal pendant as shown in the figure. If the perpendicular distance between *AB* and *CD* is 6 centimeters and area of the pendant *ABCD* is 36 square centimeters, find the length of the side *CD*.



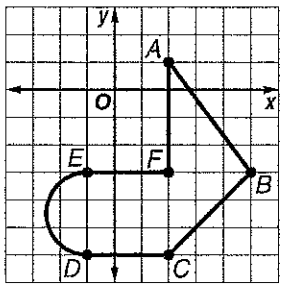
a. 2cm
b. 4.6cm
c. 8cm
d. 4cm

____ 10. Below is a sticker of an ice cream cone. Find the area the sticker will cover.



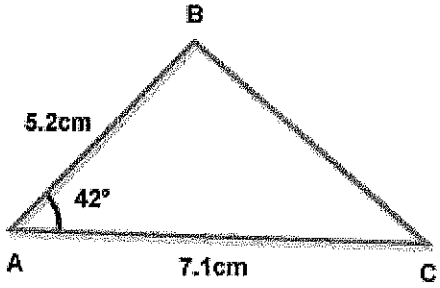
a. 75.24 cm^2
b. 94.48 cm^2
c. 131.24 cm^2
d. 132.97 cm^2

____ 11. Find the exact area of the figure. Then round to the nearest tenth.



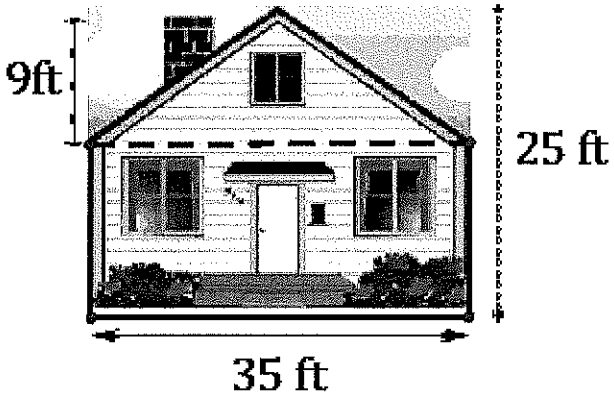
a. 36.7 units^2
b. 23.0 units^2
c. 26.6 units^2
d. 46.1 units^2

____ 12. Find the area of the triangle to the nearest tenth.



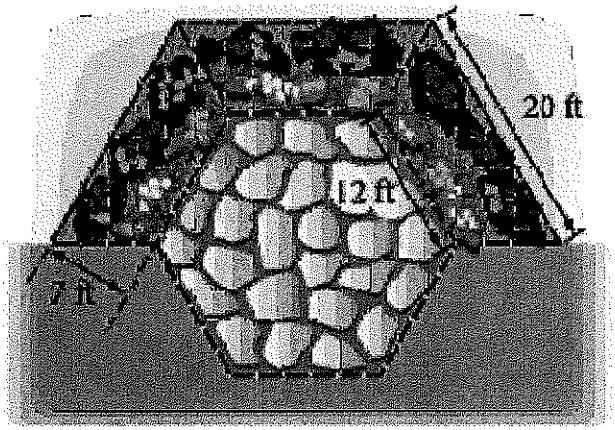
a. 4.8 cm^2
b. 12.4 cm^2
c. 24.7 cm^2
d. 18.5 cm^2

____ 13. Find area of the side of the house.



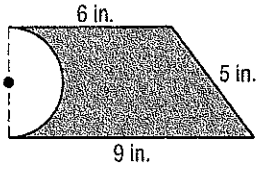
a. 875 ft^2
b. 717.5 ft^2
c. 595 ft^2
d. 1100 ft^2

____ 14. Alana, a landscape architect is designing three trapezoidal flowerbeds to wrap around the three sides of a hexagonal patio. What is the area of the entire flowerbed? Alana's fee is \$100 plus \$5 per square foot. What will the flowerbed and labor cost (without tax)?



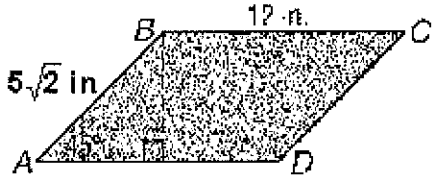
a. 112 ft^2; \$660.00
b. 336 ft^2; \$1680.00
c. 336 ft^2; \$1780.00
d. 112 ft^2; \$560.00

____ 15. Find the area of the shaded region. Then round to the nearest tenth.



a. 23.7 in^2
b. -1.8 in^2
c. 17.4 in^2
d. Can't find the height

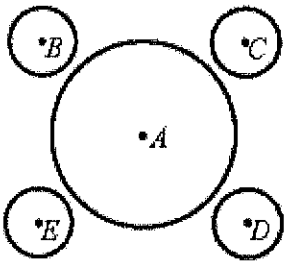
____ 16. Find the area of parallelogram *ABCD.* Round to the nearest tenth.



a. $30\sqrt{2}$ in^2
b. 60 in^2
c. $60\sqrt{2}$ in^2
d. 120 in^2

Short Answer
Show all work to receive credit.

17. An architect designed a circular fountain surrounded by four smaller circular fountains as shown in the figure. If the diameter of the inner fountain is 10 feet and each of the four surrounding fountains has a diameter of 5 feet, explain the relationship between the area of the center fountain and the combined area of the four surrounding fountains?



18. Triangle XYZ is isosceles with XY = YZ. $\angle X = 26^\circ$ and XY = YZ = 5 in. Find the area of the triangle to the nearest tenth.

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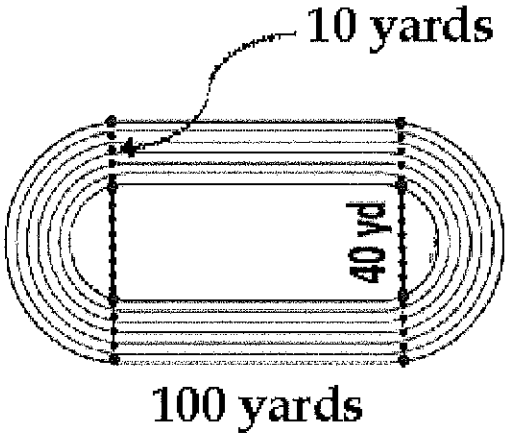
19. An athletic field is a rectangle, 100 yd by 40 yd with a semicircle at each of the short sides. A running track 10 yd wide surrounds the field. Find the area of the track.



ACC GEO-11.1,11.2,11.4 plus Triangle Supplement Practice Quiz
Answer Section

MULTIPLE CHOICE

1. A
2. D
3. A
4. A
5. A
6. D
7. C
8. A
9. D
10. A
11. B
12. B
13. B
14. C
15. A
16. B

SHORT ANSWER

17. The area of the inner fountain is equal to the area of the four surrounding fountains taken together. both 25pi

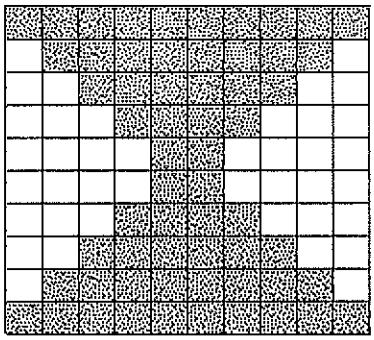
    The area of a circle is found by the formula πr^2.
18. 9.9 square in
19. 3570.976 square yards

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

ACC GEO- 11.3 & 11.5 Quiz 2015 (Old Quiz For Practice)

Multiple Choice
Identify the choice that best completes the statement or answers the question.

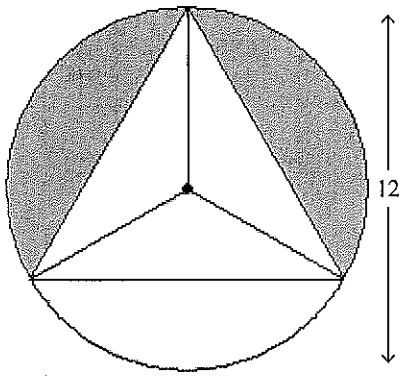
____ 1. Find the probability that a point chosen at random lies in the shaded region.



a. 0.58
b. 0.64
c. 0.60
d. 0.62

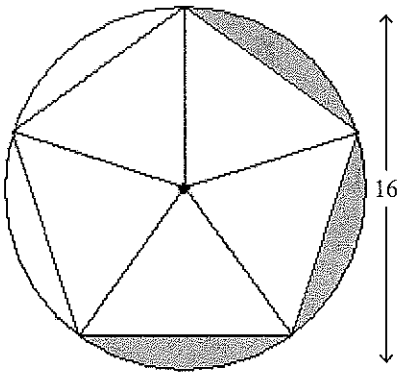
____ 2. Find the area of a regular octagon with a perimeter of 96 centimeters.
a. about 695.3 cm^2
b. about 576 cm^2
c. about 532 cm^2
d. about 119.3 cm^2

____ 3. Find the area of the shaded region. Round answers to the nearest tenth. Assume all inscribed polygons are regular.



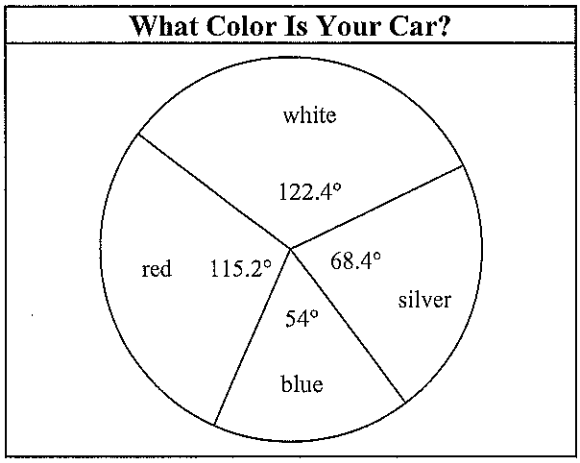
a. 22.1 $units^2$
b. 44.2 $units^2$
c. 66.3 $units^2$
d. 88.4 $units^2$

____ 4. Find the area of the shaded region. Round answers to the nearest tenth. Assume all inscribed polygons are regular.



a. 29.3 units^2
b. 19.5 units^2
c. 23.7 units^2
d. 26.1 units^2

Seniors at a high school were asked what color car they drive. The results were put in a circle graph. The measure of each central angle is shown. If a senior is chosen at random from this school, find the probability of each response.



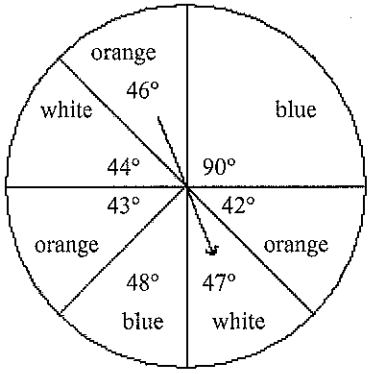
____ 5. Car color is red.
a. 0.38
b. 0.36
c. 0.32
d. 0.28

____ 6. Car color is *not* white.
a. 0.34
b. 0.56
c. 0.68
d. 0.66

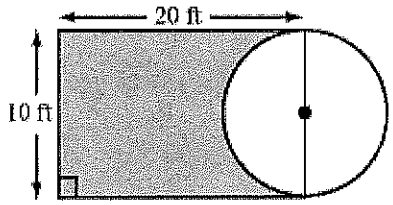
Name: _____ **ID: A**

Short Answer
Show all work to receive credit.

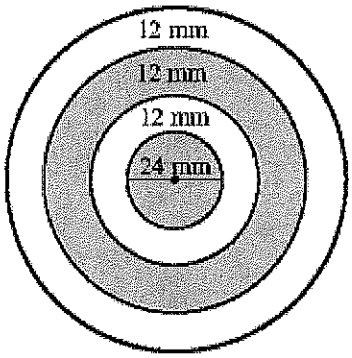
7. Find the area of the white sectors. The diameter of the spinner is 12 cm.



8. One side of a rectangle is a diameter of a circle. The length of the rectangle is 20 feet and the width of the rectangle is 10 feet. To the nearest hundredth, what is the probability that a point chosen at random is in the shaded region?



9. A beginning archer aims at a target of four concentric circles. What is the probability that he will shoot in the shaded region?



Find the area of each polygon. Round to the nearest tenth.

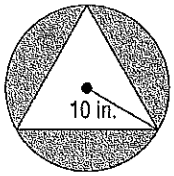
10. a regular hexagon with apothem length of 4.3 centimeters

A = _____

11. a regular nonagon with side length of 12 centimeters

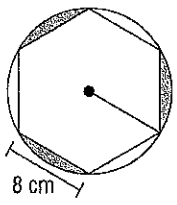
A = _____

12. Find the area of the shaded region to the nearest tenth. Assume that the triangle is equilateral and the radius is 10 in.



A = _____

13. Find the area of the shaded region to the nearest tenth. Assume that the hexagon is regular where the side length of the hexagon is 8cm.



A = _____

ACC GEO- 11.3 & 11.5 Quiz 2015 (Old Quiz For Practice)
Answer Section

MULTIPLE CHOICE

1. C
2. A
3. B
4. A
5. C
6. D

SHORT ANSWER

7. 28.6 units^2, 0.25 **91pi/10 square cm**
8. Area of shaded: 160.73 sq ft, Area of Total: 239.27 sq ft
   P(S)= 67.18%

   $$P = \frac{\text{area of the shaded region}}{\text{total area}}$$
9. Area of Shaded: 864pi sq mm, Area of total: 2304pi sq mm.
   $\frac{3}{8}$= .375, P(S)= 37.5%

   $$P = \frac{\text{area of the shaded region}}{\text{total area}}$$
10. r= 5.0cm A= 65.0 cm^2
11. r= 17.5 cm, A = 885.8 cm^2
12. r = 10 in, Area of shaded= 184.3 in^2
13. 17.4 cm^2