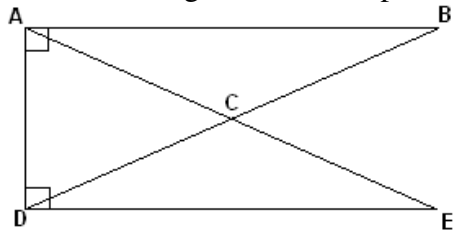


Simplify all answers and show your work!

1. There are _____ degrees in a triangle.
2. There are _____ degrees in a line.
3. There are _____ degrees in a circle.
4. What is the vertex of $\angle BES$? _____
5. An angle that is between 90° and 180° is called _____.
6. An angle with a measure of 90° is a _____ angle.
7. Two lines in a plane that cross in a 90° angle are called _____ lines.
8. A triangle with three equal sides is called an _____ triangle.
9. Write in scientific notation: 45,000,000,000
10. Write in engineering notation: 0.0000641
11. Write using the correct metric prefix: 2,300,000 watts
12. $2.6374 \text{ m} =$ _____ km
13. $21 \text{ kg} =$ _____ g

Refer to the figure below for problems 14 – 19.

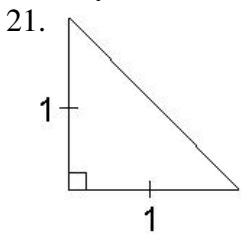


14. Name an acute angle. _____
15. Name an obtuse angle. _____
16. Name a right triangle. _____
17. What is the measure of angle ADE? _____

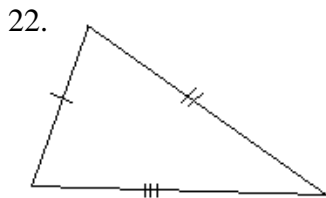
If the measure of $\angle ACD$ is 68° and the lengths $\overline{AC} = \overline{DC}$,

18. find the measure of $\angle CAD$.
19. find the measure of $\angle CDA$.
20. find the measure of $\angle CDE$

Classify the following triangles as a) acute, right, or obtuse and b) scalene, isosceles, or equilateral.



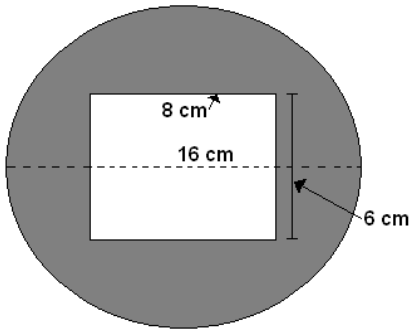
- a) _____
- b) _____



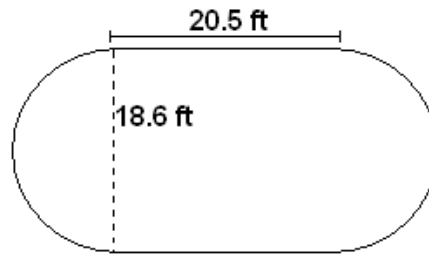
- a) _____
- b) _____

23. Draw an example of two figures that have the same area but different perimeter.

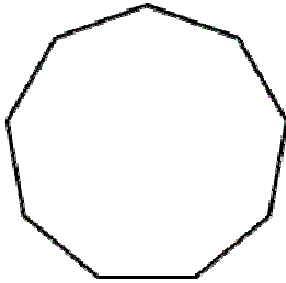
24. Find the shaded area:



25. Find the area of the figure:



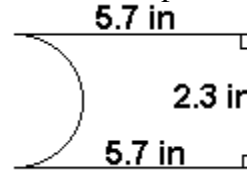
26. The figure below is a regular nonagon.



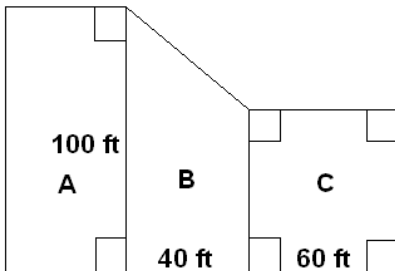
a) Find the sum of the interior angles.

b) Find the measure of one interior angle.

27. Find the perimeter of the figure below.



28. Mr. Lewis is renting spaces B and C in a strip mall, as shown in the figure below. Space C is square and space B is trapezoidal. What is the square footage of the two spaces together?



29. The circumference of the Earth at the equator is about 25,000 miles. What is the radius of the Earth, rounded to the nearest mile?

30. The median between incoming and outgoing traffic at the Augusta Community College is shaped like a rectangle capped with semicircles as shown below. A curb needs to be built around the median. How long will curb need to be?

