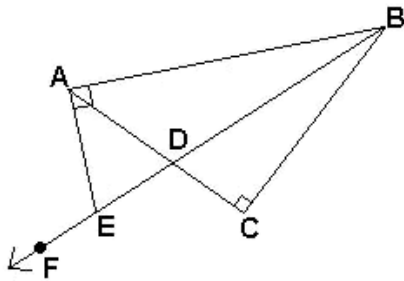


**Simplify all answers and show your work!**

- 1) What is the vertex of  $\angle GSK$ ? \_\_\_\_\_
- 2) There are \_\_\_\_\_ degrees in a triangle.
- 3) There are \_\_\_\_\_ degrees in a circle.
- 4) There are \_\_\_\_\_ degrees in a line.
- 5) An angle with a measure of  $90^\circ$  is a \_\_\_\_\_ angle.
- 6) An angle that has measure between  $90^\circ$  and  $180^\circ$  is called \_\_\_\_\_.
- 7) Two lines in a plane that cross in a  $90^\circ$  angle are called \_\_\_\_\_ lines.
- 8) A triangle with no equal sides is called a \_\_\_\_\_ triangle.
- 9) Write in scientific notation: 24,500,000
- 10) Write in engineering notation: 0.0000000803
- 11) Write using the correct metric prefix: 1,500,000,000 volts
- 12)  $0.381 \text{ m} =$  \_\_\_\_\_ cm
- 13)  $850,000 \text{ mg} =$  \_\_\_\_\_ g

Refer to the figure below for problems 14 – 19.

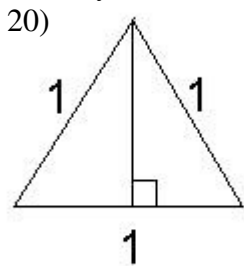


- 14) Name an acute angle \_\_\_\_\_
- 15) Name an obtuse angle \_\_\_\_\_
- 16) Name a right triangle \_\_\_\_\_
- 17) What is the measure of  $\angle ACB$ ?

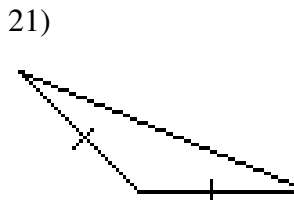
If the measure of  $\angle DAB$  is  $40^\circ$ ,

- 18) find the measure of  $\angle DAE$
- 19) find the measure of  $\angle ABC$

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

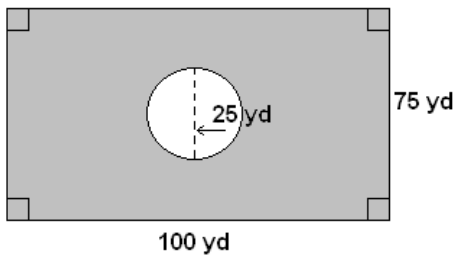


- a) \_\_\_\_\_
- b) \_\_\_\_\_

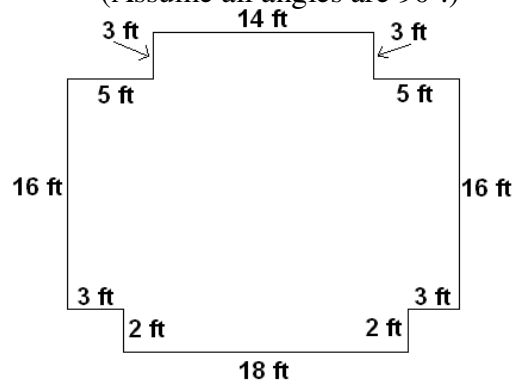


- a) \_\_\_\_\_
- b) \_\_\_\_\_

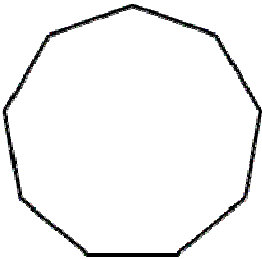
22) Find the shaded area:



23) Find the area of the figure below:  
(Assume all angles are  $90^\circ$ .)



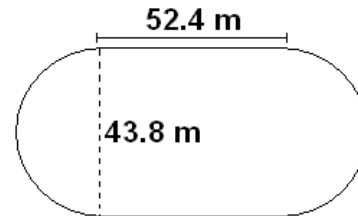
24) The figure below is a regular nonagon.



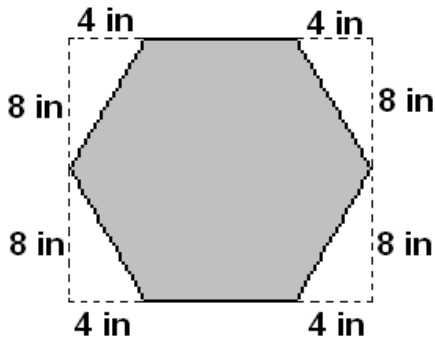
a) Find the sum of the interior angles.

b) Find the measure of one interior angle.

25) Find the perimeter of the figure below.



26) A sign is in the shape of a regular hexagon as shaded below where the dotted segments around the hexagon form a square. The sign needs to be painted with reflective paint. How many square inches of paint will be used to cover the sign with **two** coats of paint?



27) Jeremy is putting up a chair rail in a dining room that is the shape below. If the chair rail costs \$21.99 for an 8-foot piece, how much will the chair rail cost? (All angles are  $90^\circ$ .)

