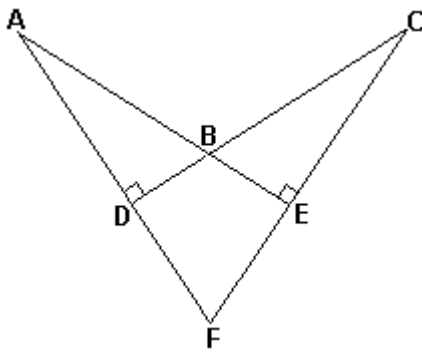


Simplify all answers and show your work!

1. There are _____ degrees in a circle.
2. There are _____ degrees in a line.
3. There are _____ degrees in a triangle.
4. What is the vertex of $\angle ADG$? _____
5. An angle that is between 0° and 90° 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 at least two equal sides is called an _____ triangle.
9. Write in scientific notation: 0.00000000158
10. Write in engineering notation: 132,000,000

11. Write using the correct metric prefix: 0.000029 liters
12. 52.67 kg = _____ g
13. 59.1 cm = _____ mm

Refer to the figure below for problems 14 – 19.



14. Name an acute angle. _____
15. Name an obtuse angle. _____

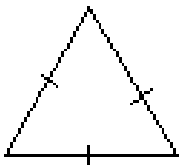
16. Name a right triangle. _____
17. What is the measure of angle BDF? _____

If the measure of $\angle ABD$ is 72°

18. find the measure of $\angle BAD$.
19. find the measure of angle $\angle ABC$.

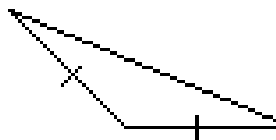
Classify the following triangles as a) acute, right, or obtuse and b) scalene, isosceles, or equilateral.

20.



- a) _____
- b) _____

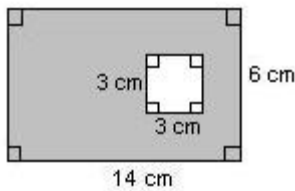
21.



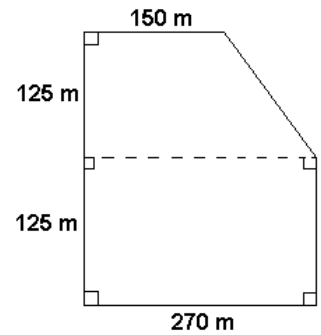
- a) _____
- b) _____

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

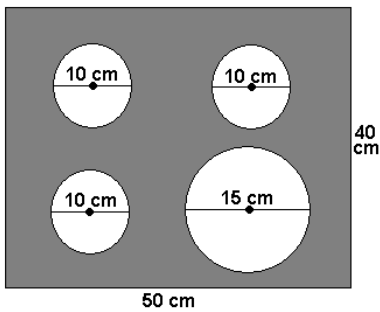
23. Find the shaded area:



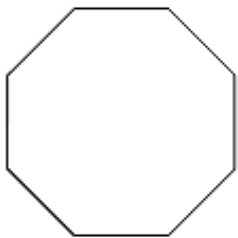
24. Find the area of the figure:



25. A rectangular stovetop has three circular burners with a diameter of 10 cm and one circular burner with a diameter of 15 cm as shown. Find the area of the stovetop excluding the burners.



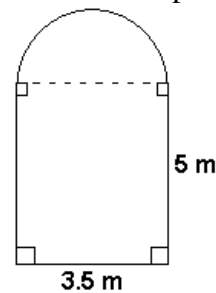
26. The figure below is a regular octagon.



a) Find the sum of the interior angles.

b) Find the measure of one interior angle.

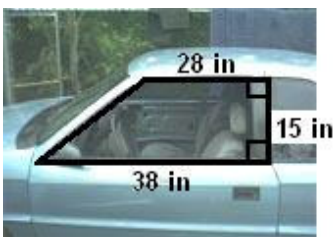
27. Find the perimeter of the figure below.



28. Which contains more pizza: one pizza with a diameter of 12 inches or two pizzas with a diameter of 8 inches? Justify your answer.

29. A tent is constructed by sewing together four triangular-shaped pieces. Each triangle has a base length of 8 feet and a height of 4.5 feet. How many square feet of fabric is used to make all four pieces of the tent?

30. Joseph is an automotive glass technician who tints car windows. He measures a driver's side window and find the dimensions as shown in the picture.



a) What is the area of the car window?

b) If he uses a roll of tinting film that is 30 inches wide and cuts a rectangular piece to fit the window, what is the area of the piece of film needed to be able to cover the window without seams (with one single piece)?

c) What is the area of the film wasted to perform the job?