


Concept: Perimeter and Area of Polygons

Name: _____

COMPUTER COMPONENT

Instructions:

In  follow the **Content Menu** path:

Measurement and Geometry > Perimeter and Area of Polygons



Work through all Sub Lessons of the following Lessons **in order**:

- *In This Topic*
- *Polygons ... What are they?*
- *Classify Polygons with Venn Diagrams*
- *Walk Around A Polygon*
- *Introduction to Area*
- *Areas of Polygons*
- *Fractions of a Square*
- *Tangrams and Area*
- *Relationships- Area & Perimeter*
- *Given Area and Perimeter- Create a shape*
- *Problem Section*



As you work through the computer exercises, you will be prompted to make notes in your notebook/math journal.

SUMMARY

1. *Fill in the blanks.*

A _____ is a _____ shape.

It lies in a _____ which means it is _____.

It is made up of _____ lines.

plane


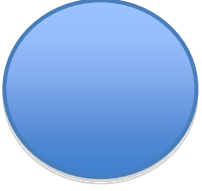
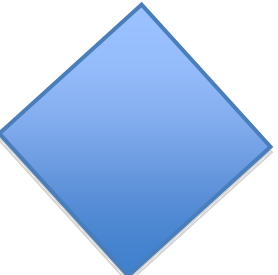
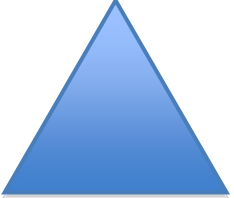
straight

flat

closed

polygon

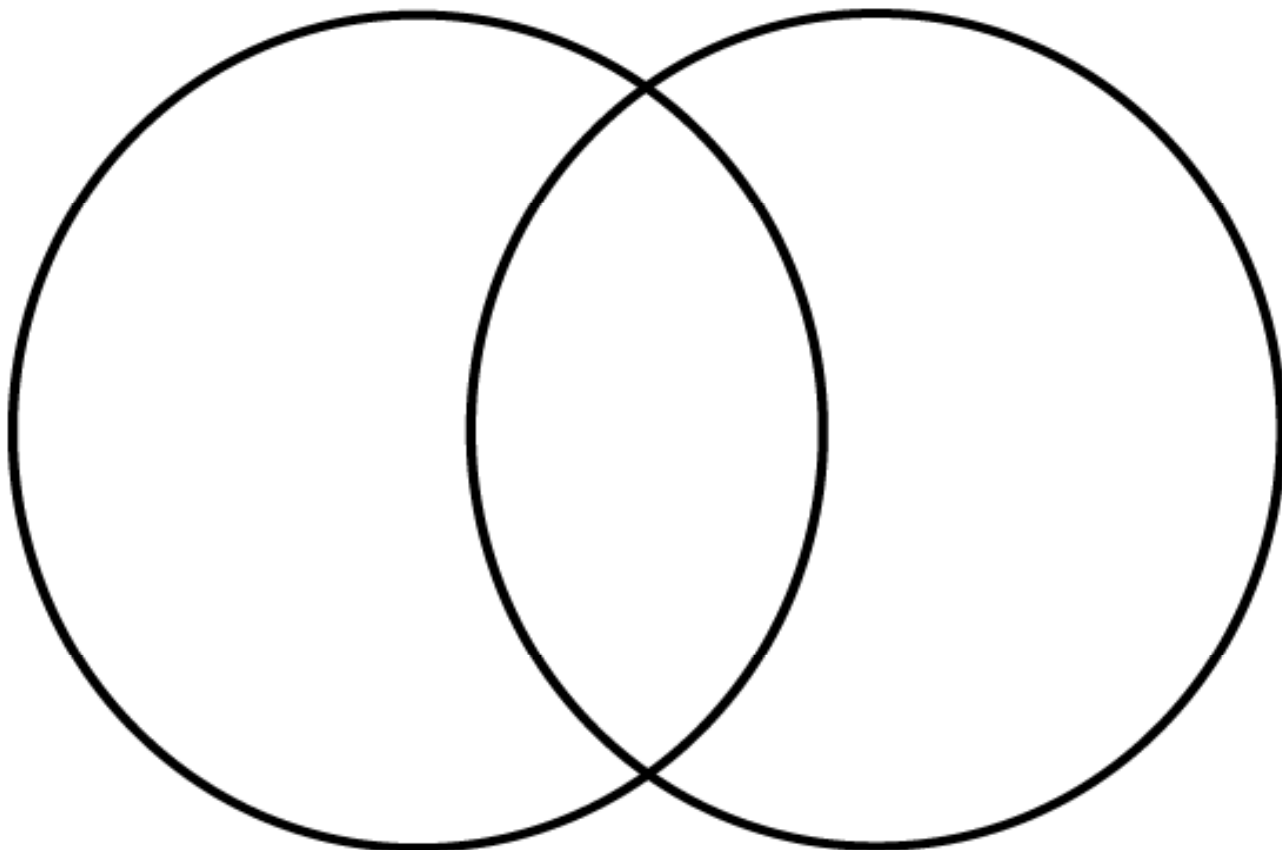
2. Use your previous knowledge to classify the following polygons.

Shape Sample	Name	# of Sides	Regular or Irregular
			
			
			
			

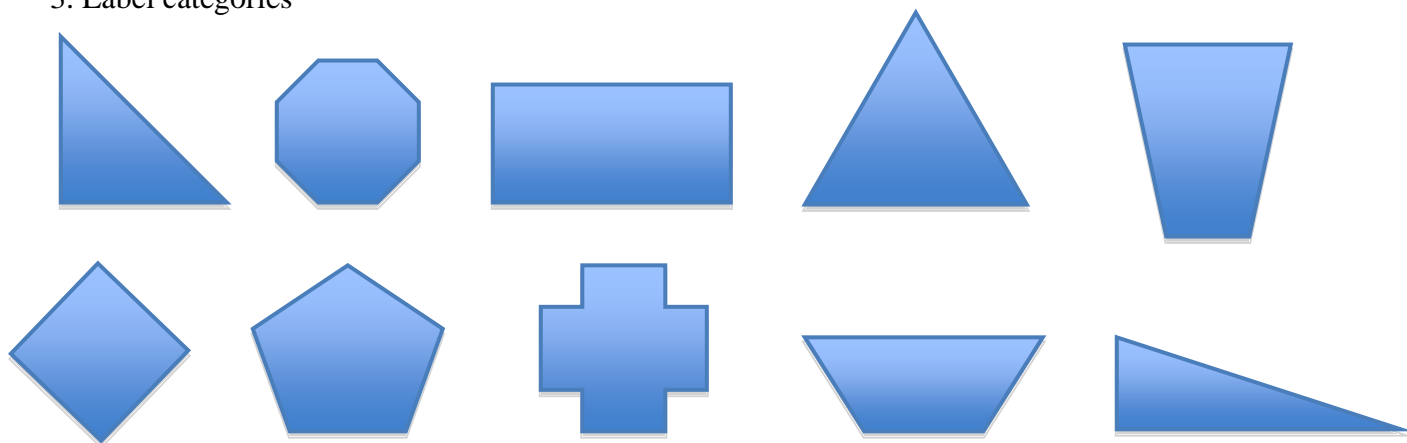
Does everything make sense here? *Explain*

OFF COMPUTER EXERCISES

1. Use the Venn Diagram to ‘sort and classify’ the shapes below.

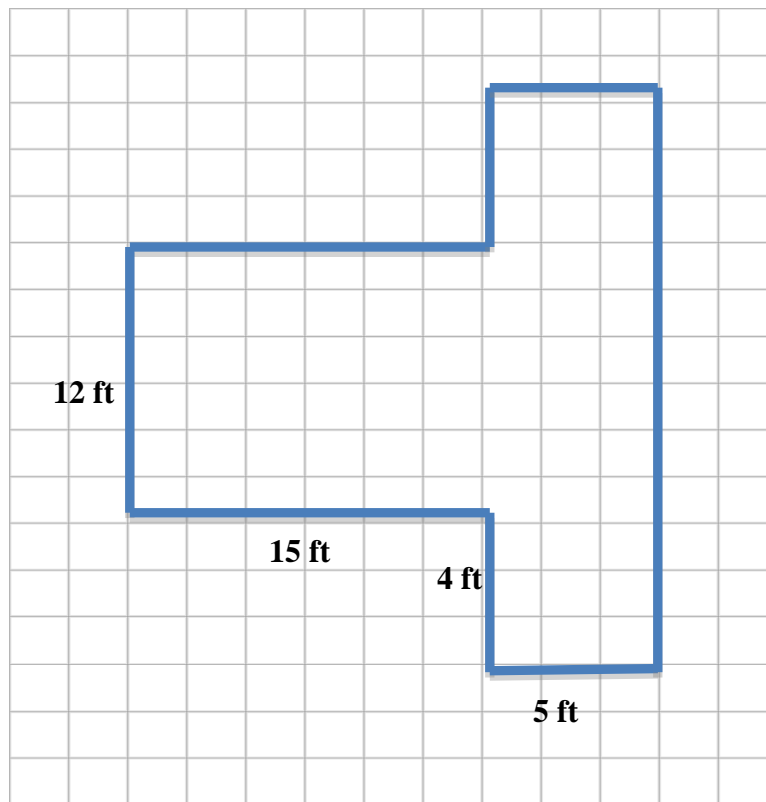

Instructions:

1. Cut out the shapes and dry-fit/sort them in to possible categories.
2. Glue them into categories and be prepared to explain your reasoning.
3. Label categories



The distance around an object is called the _____.

2. Find the amount of fencing material that is required for this backyard.

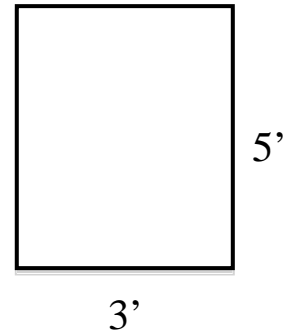


Show your calculations here.

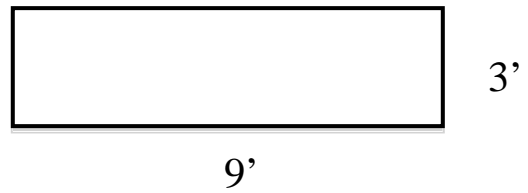
The amount of surface is called _____.

3. Area or Perimeter- Use a ruler to draw a straight line connecting the shape with the correct area or perimeter.

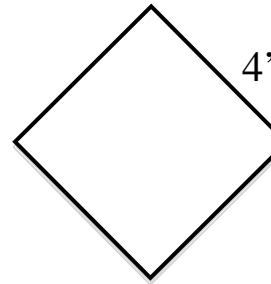
9 ft.



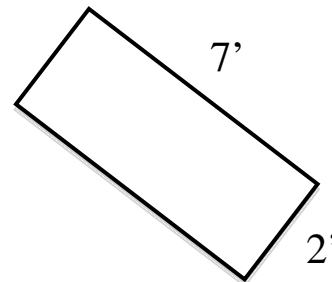
14 sq. ft.



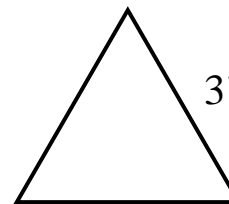
24 ft.



15 sq. ft.



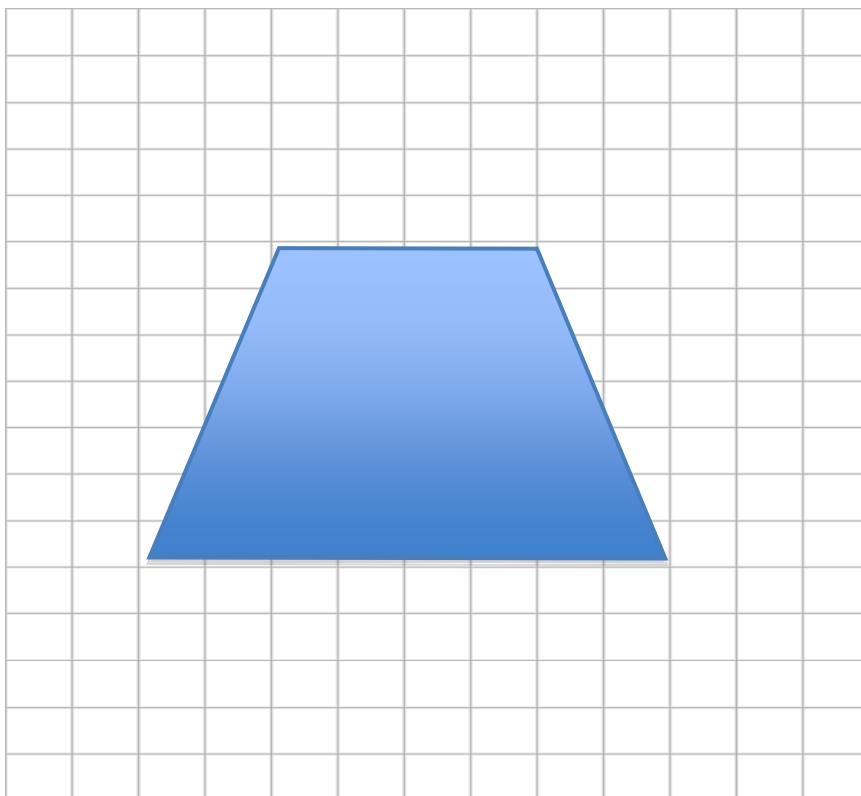
16 sq. ft.



4. A ‘trapezoid’ is a quadrilateral with 1 pair of parallel sides.

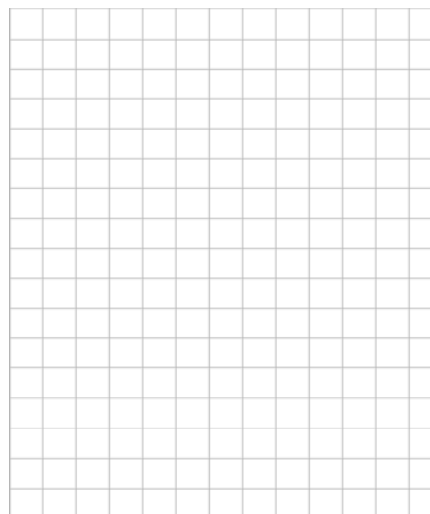
Find the area of this trapezoid

Hint: Divide the trapezoid in to shapes that you already know how to find the area of.

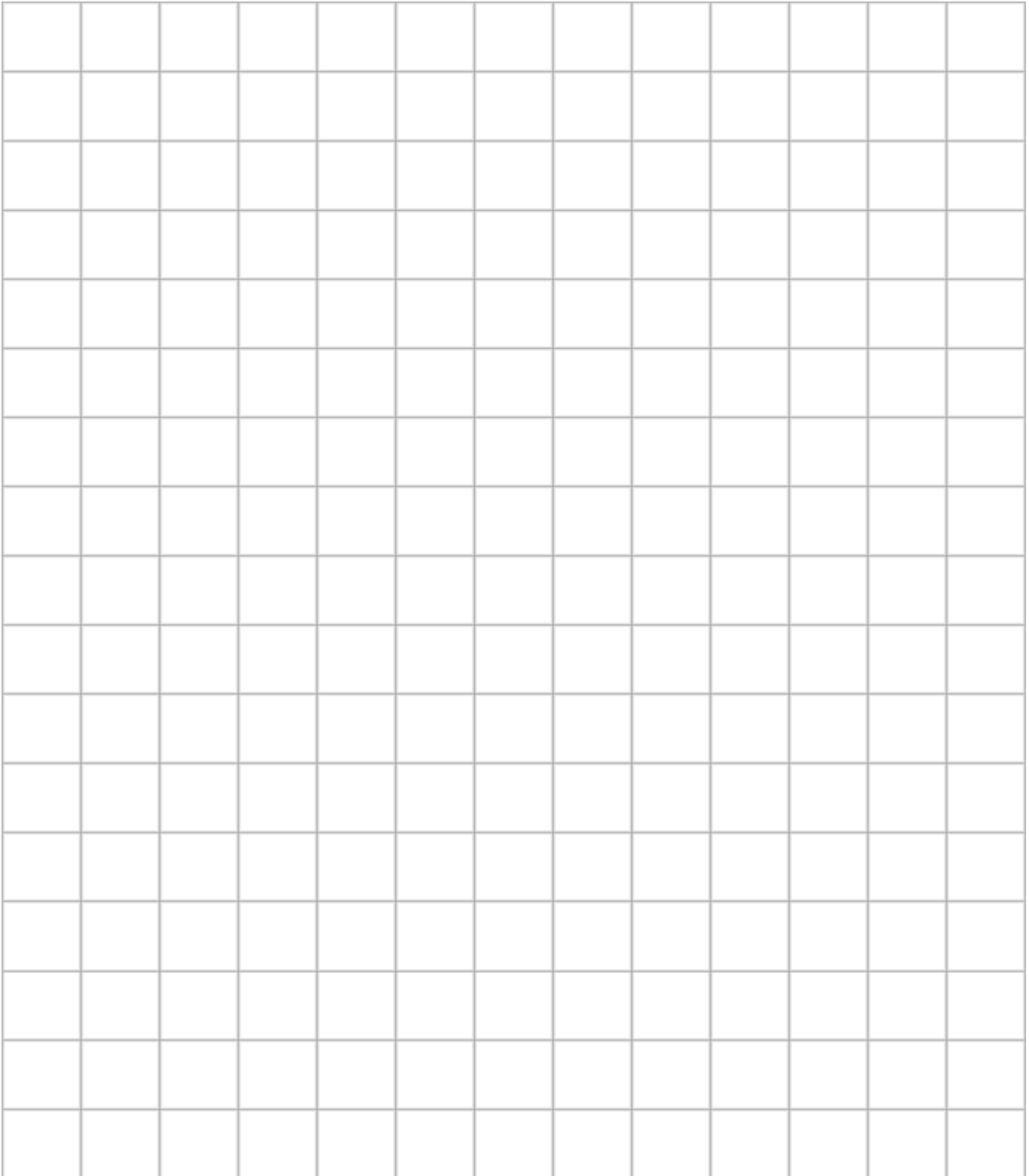


Show your calculations here.

5. Draw a right triangle with an area of 12 sq. units.



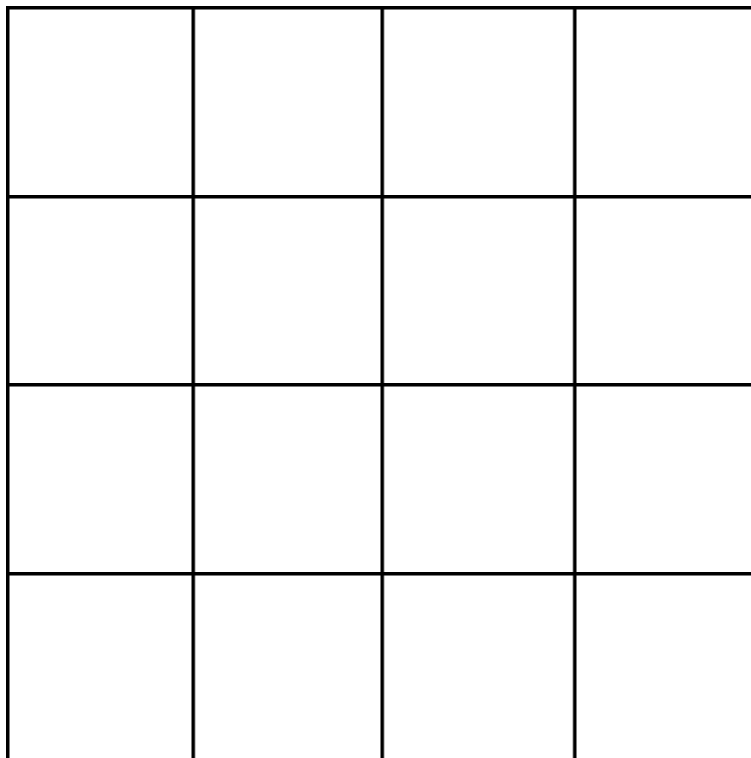
6. How many different rectangles can you make with an area of 36 sq. units?



7. Terrific Tangrams

Instructions:

- Follow lines, precisely as possible, to cut out all 7 shapes in the tangram.
- Keep all shapes together, as they will all be needed for the following activities



Each square on the grid is 1 square inch. *The grid will act as an excellent measuring tool as you organize and arrange tangram pieces on the grid to find the area of each piece in square inches.*

Find the area of each tangram piece.

- (a) Parallelogram= _____ sq. in.
- (b) Small triangle= _____ sq. in.
- (c) Large triangle= _____ sq. in.
- (d) Medium triangle= _____ sq. in.
- (e) Square= _____ sq. in.
- (f) The whole tangram puzzle _____ sq. in.

(g) Use four tangram pieces to make a rectangle with an area of 6 square inches. *Sketch your solution here.*

(h) Use five tangram pieces to make a trapezoid with an area of 12 square inches. *Sketch your solution here.*

