



Republic of the Philippines

Department of Education Regional Office IX, Zamboanga Peninsula

MATHEMATICS

Identifying and Describing

Triangles and Quadrilaterals

Quarter 3 - Module 2:

 $Z_{\text{est for}} \mathcal{P}_{\text{rogress}}$

Z al of Partnership

Name of Learner: Grade & Section: Name of School:



The module contains two lessons:

- Identifying and describing triangles according to sides and angles
- Identifying and describing the different kinds of quadrilaterals: square, rectangle, parallelogram, trapezoid, and rhombus

After going through this module, you are expected to:

- 1. Identify and describes triangles according to sides and angles
- 2. Identify and describes the different kinds of quadrilaterals: square, rectangle, parallelogram, trapezoid, and rhombus



肇 🖉 What I Know

- **A. Directions:** Choose the letter of the correct answer. Write the chosen letter on the space provided for you.
 - ____ 1.Which angle measures more than 90° but less than 180°?
 - A. right angle C. obtuse angle
 - B. acute angle D. none of the above

_____ 2.What kind of angle is represented when the hands of a clock says it's 12:15?

- A. right angle C. obtuse angle
- B. acute angle D. none of the above

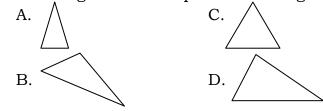
____ 3.Which angle shows an acute angle?

D. A. В.

_____ 4.Which triangle has no equal sides?

- A. isosceles triangle C. equilateral triangle
- B. scalene triangle D. none of the above

___ 5.Which figure shows equilateral triangle?



B. Directions: Draw a square \Box if your answer is True or a rectangle \Box if it is False.

- ____ 1.All angles of quadrilaterals are equal.
- _____ 2.A quadrilateral that is divided diagonally forms 2 triangles.
- ____ 3.Any 4-sided polygon is a quadrilateral.
- _____ 4.All triangles have right angles.
- ____ 5.A triangle is a 3-sided polygon.



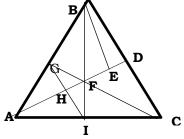
Activity 1: Who am I?

Directions: Name what is being described in each item.

Name	Figure and Description
1.	Who am I?
	I am a triangle.
	I have right angle.
2.	Who am I?
	I am a triangle.
	I have three equal sides.
3.	Who am I?
	I am a triangle.
	I have obtuse angles.
	My angle measures more than 90° but less than 180°.
4.	Who am I?
	I am a triangle.
	I have no congruent or equal sides.
5.	Who am I?
	I am a triangle.
	I have acute angles.
	My angle measures less than 90°.
6.	Who am I?
	I am a quadrilateral.
	Both pairs of my opposite sides are parallel.
	Both pairs of my opposite angles are congruent.
7. 8. 9.	Who am I?
	I am a parallelogram.
	I have 4 right angles.
	My diagonals are congruent.
	Who am I?
	I am a parallelogram.
	I have four equal sides.
	Who am I?
	I am a parallelogram.
10	I have four equal sides and four right angles.
10.	Who am I?
	I am a quadrilateral.
	I have exactly one pair of parallel sides



A big triangle has been divided into small triangles of different sizes.



- In the given figure above, how many small triangles does it have?
- Will you able to classify the triangles according to its angle? How?

Look at the different quadrilaterals.



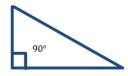
- What polygon has 4 sides and 4 angles?
- What are the different quadrilaterals?
- Do you think it is important to know how to identify and describe quadrilaterals? Why?



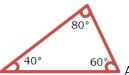
Let us study the classification of triangles.

A **triangle** is a three-sided polygon. It has three vertices and three angles.

> **Triangles** can be classified according to their **angles**.



A **right triangle** has a right angle which measures 90°.

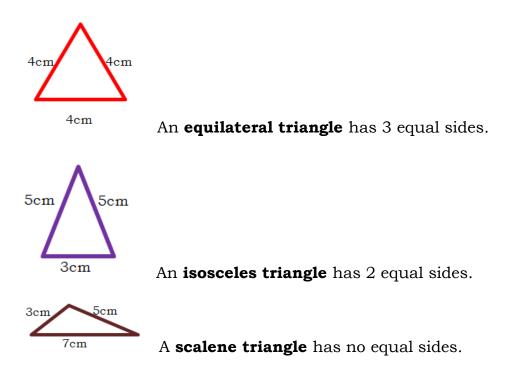


An **acute triangle** has 3 acute angles, each measuring less than 90° .



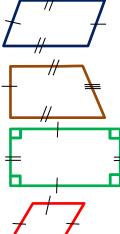
An **obtuse triangle** has an obtuse angle which measures more than 90° but less than 180°.

> **Triangles** can also be classified according to their **sides**.



Let us also study the different kinds of quadrilaterals.

Quadrilaterals are four-sided plane figures that have four angles and four vertices.



Parallelogram is a quadrilateral whose opposite sides are parallel and equal.

Trapezoid is a quadrilateral that has exactly one pair of parallel sides.

Rectangle is a parallelogram whose opposite sides are parallel and equal in length. It has 4 right angles.



Rhombus is a parallelogram with 4 equal sides. It has no right angles.



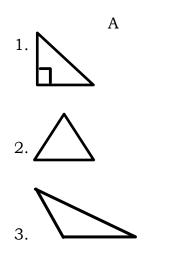
Square is a parallelogram that has 4 equal sides and 4 right angles.

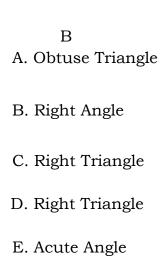
Parallelograms are quadrilaterals that the opposite side are parallel. **Squares,** rectangles and rhombus are parallelogram.



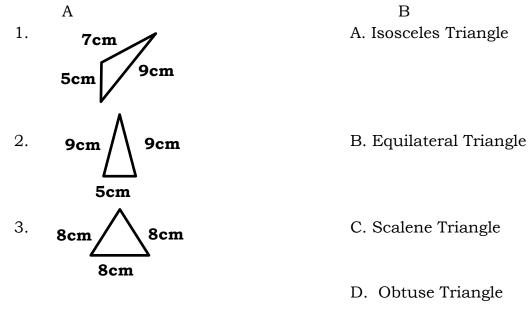
Activity 2

I. Directions: Identify the following triangles according to their angles. Match column A with column B.

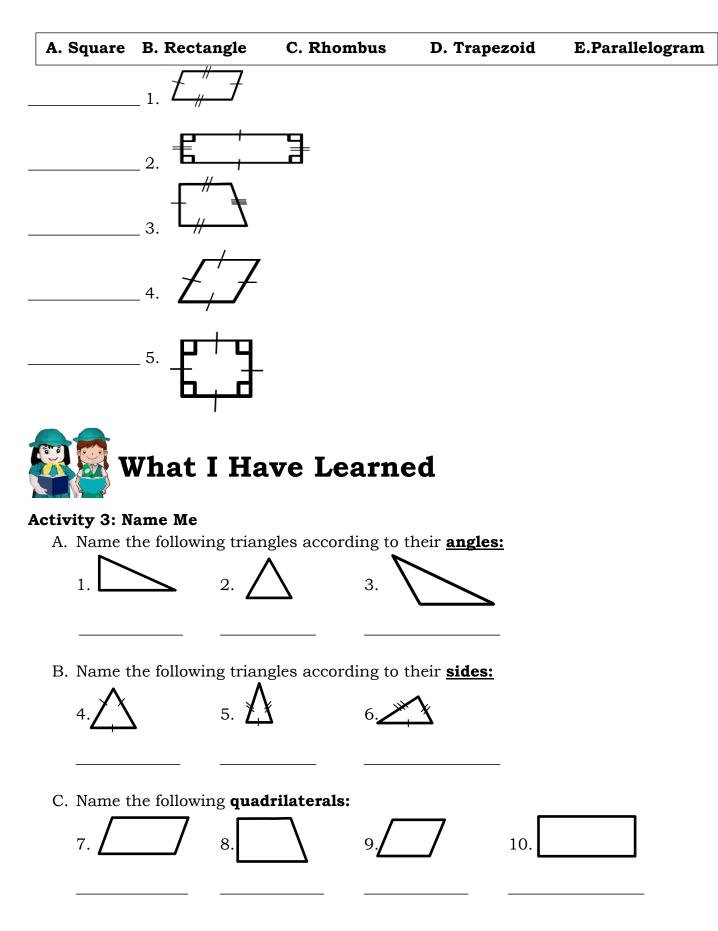




II. Directions: Identify the following triangles according to their sides. Match column A with column B.



III. Directions: Identify the following quadrilaterals. Choose the letter of the correct answer inside the box.





Activity 4: Draw Me

Directions: Draw the following figures with the indicated measurement:

- 1. Acute triangle, 70°
- 2. Obtuse triangle, 110°

3. Right triangle

- 4. Equilateral triangle, each side measures 7cm.
- 5. Scalene triangle, side A measures 5cm, side B measures 6cm, side C measures 3cm.

6. Square- 7cm

- 7. Trapezoid- 5cm, 7cm, 4cm
- 8. Rhombus- 6cm
- 9. Rectangle-5cm, 10cm
- 10. Parallelogram- 8cm, 4cm



Directions: Read each item carefully. Write the letter of your answer on the space before the number.

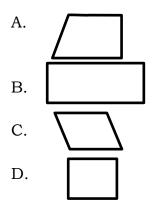
____ 1.What type of triangle has angles 64°, 47° and 69°?

- A. acute triangle
- B. obtuse triangle
- C. right triangle
- D. obtuse and acute triangle
- ____ 2.What do you call a triangle with no equal sides?
 - A. isosceles triangle
 - B. scalene triangle
 - C. equilateral triangle
 - D. right triangle

____ 3.Which of the following statement describes an equilateral triangle.

- A. It is a triangle with two equal sides.
- B. It is a triangle with no equal sides.
- C. It is a triangle with three equal sides.
- D. It is a triangle with two to three equal sides.
- ____ 4. How are triangles classified?
 - A. They are classified according to line segments.
 - B. They are classified according to sides.
 - C. They are classified according to angles.
 - D. They are classified according to sides and angles.

____ 5.Which of the following is a trapezoid?



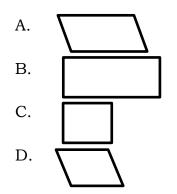
_ 6.What do you call a quadrilateral that has exactly one pair of parallel sides?

- A. square
- B. trapezoid
- C. rectangle
- D. rhombus

____ 7.What do you call a parallelogram that has 4 right angles and its opposite sides are parallel and equal.

- A. rhombus
- B. square
- C. rectangle
- D. parallelogram

____ 8.Which shows a rhombus?



____ 9.What kind of quadrilateral has 4 equal sides and 4 right angles?

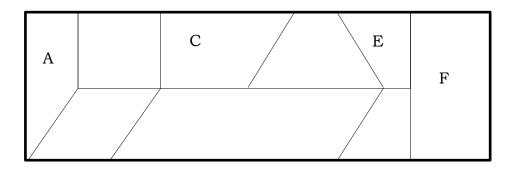
- A. square
- B. rectangle
- C. parallelogram
- D. trapezoid

_____10.What do you call a quadrilateral whose opposite sides are parallel and equal?

- A. square
- B. parallelogram
- C. rectangle
- D. rhombus

Additional Activities

- A. Draw the following triangles correctly.
- 1. Right triangle
- 2. Obtuse triangle
- 3. Acute triangle
- 4. Equilateral triangle
- 5. Isosceles triangle
- 6. Scalene triangle
- B. Using the drawing below, Identify the figures represented by the letters.



References

Tabilang, Alma R., Ian Jay B. Arce, Rodrigo V. Pascua, Nelma P. Calayag, et al., *Mathematics 4 Learner's Material.* edited by Mary Jeanne B. Aldeguer. Pasig:Departmentof Education, 2015

Tabilang, Alma R., Ian Jay B. Arce, Rodrigo V. Pascua, Nelma P. Calayag, et al., *Mathematics 4 Teachers Guide.* edited by Mary Jeanne B. Aldeguer. Pasig:Departmentof Education, 2015

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