

Republic of the Philippines

Department of Education Regional Office IX, Zamboanga Peninsula

MATHEMATICS

Quarter 3 - Module 4:

Can You Relate Me?

Name of Learner:

Grade & Section:

Name of School:

Zest for Progress Zeal of Partnership



This module contains a series of activities that will help you learn and understand how triangles and quadrilaterals are related to each other.

It contains two lessons:

- Lesson 1 Relating Triangles to Quadrilaterals
- Lesson 2 Relating One Quadrilateral to Another Quadrilateral

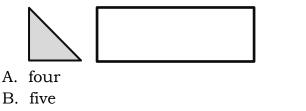
After going through this module, you are expected to:

- 1. Relate triangles to quadrilaterals. (M4GE-IIId-18)
- 2. Relate one quadrilateral to another quadrilateral. (M4GE-IIId-18.2)



Directions: Choose the letter of the correct answer. Write the chosen letter on the space provided for you.

1. How many triangles of the shape and size of the shaded triangle will fit the rectangle?



_____2. What polygon is formed if you divide this figure into three equal parts?

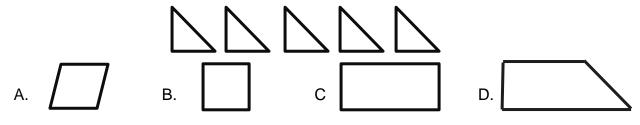


A. squares B. triangles C. rhombuses D. kites

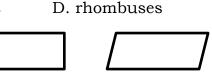
C. six

D. seven

____3. What quadrilateral is formed if these five triangles are put together?



- 4. How many triangles and quadrilaterals are in the figure?
 - A. 14 triangles and 4 quadrilaterals
 - B. 15 triangles and 4 quadrilaterals
- _5. What is formed if you draw a diagonal line in this square? A. kites B. square C. triangles D. rhombuses
- _____6. How are these figures related?



- A. Both have 2 pairs of parallel sides and 4 vertices
- B. Both have 1 pair of parallel side and 4 vertices.
- C. Both have one pair of parallel side.
- D. Both have 4 right angles.
- _____7. How is the trapezoid related to the isosceles trapezoid?



A. Both have 4 sides and 4 right angles.B. Both have one pair of parallel sides.

- C. All angles in both figures are equal.D. Both have 2 pairs of parallel sides.
- __8. The following statements are the relationship between the two figures below **EXCEPT** one.

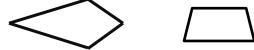


A. They have 2 pairs of parallel sides.B. They have 4 right angles.

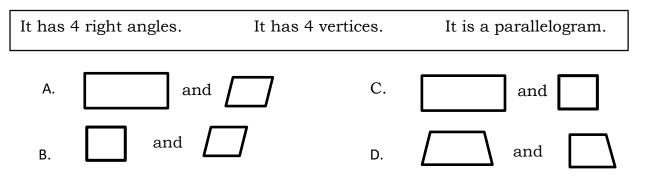
A. They have 4 sides and 4 right angles.

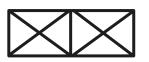
B. They have 4 corners/vertices.

- C. They have 4 equal sides.
- D. They are quadrilaterals.
- 9. The following statements are the relationship between the two figures **EXCEPT** one.



- C. They are quadrilaterals. D. They are parallelogram.
- _10. Which two figures are related with these characteristics?





C. 16 triangles and 2 quadrilaterals

D. 18 triangles and 3 quadrilaterals



Activity 1: Match Me

Directions: Match the quadrilaterals in column A with its description in column B. Write the letter of the correct answer before the number.

Column A

____2. Parallelogram

____1. Rectangle

____3. Square

4. Rhombus

5. Trapezoid

Column B

- A. It has 4 sides but no right angles.
 - B. It has 4 equal sides and 4 right angles
 - C. It has 2 pairs of parallel lines and 4 right angles.
 - D. It has 2 pairs of parallel lines.
 - E. It has exactly one pair of parallel sides.



What's New

Everyone is busy preparing for the school's Foundation Day celebration.

Teacher Jane is assigned to make *banderitas* out of square colored papers. She is planning to finish the work in just two hours.

Questions:

- 1. What did Teacher Jane make for the school's Foundation Day celebration?
- 2. What material did she use in making **banderitas**?
- 3. What did she do with the square colored papers to make **banderitas?**
- 4. If you were one of the pupils of Teacher Jane, how will you show your kindness to her?
- 5.How would others feel if we helped them?



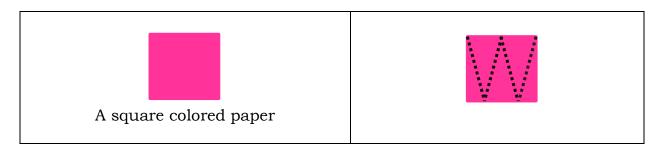
Let us study how triangle is related to quadrilateral.

A **triangle** is a three-sided polygon. It has 3 vertices and three angles. It can be made from some quadrilaterals without any parts wasted.

A **quadrilateral** is a polygon with four sides and four angles. It can be divided into triangles.

Study the figures below:

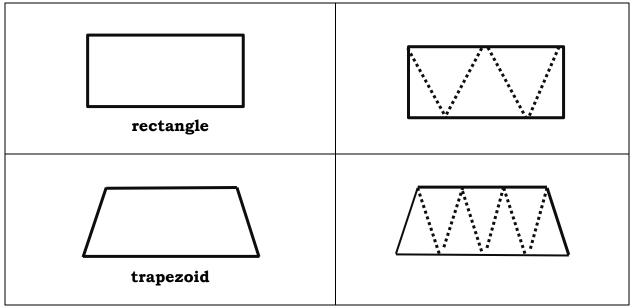
Teacher Jane traced outlines of triangles on the square colored papers.



Then she cut them to produce triangles for the **banderitas**.



We can also make triangular shapes from rectangle and trapezoid.

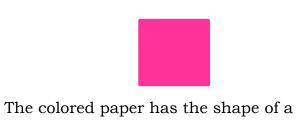


Let us also study how one quadrilateral is related to another quadrilateral.

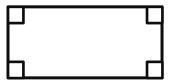
The square, rhombus, rectangle, trapezoid, isosceles trapezoid, and kite are quadrilaterals. They all have four sides and four vertices. They are related to each other in some characteristics.

Study the figures below:



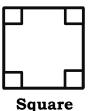


The side of the table has the shape square. of rectangle.



A rectangle has 2 pairs of parallel sides. It has 4 corners /vertices. It has 4 right angles.

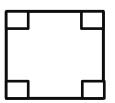
Rectangle



A square has 4 equal sides. It has 4 corners /vertices. It has 4 right angles.

> The rectangle and the square are related because both have four corners and 4 right angles.

Let us study another example:

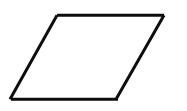


A square has 4 equal sides.

It has 4 right angles.

It has 4 corners/vertices





A rhombus has 4 equal sides.

It has 4 corners/vertices.

It has no right angles.

rhombus

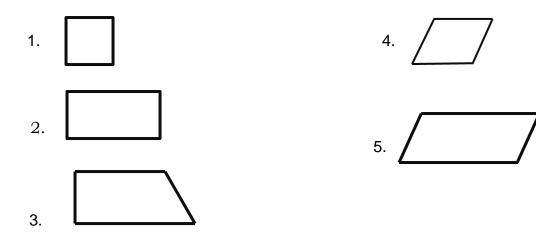
> The square and rhombus are related because both have 4 equal sides and 4 corners/vertices.



Let us try to answer this activity about relating triangles to quadrilaterals.

Activity 2: Draw Me

Directions: Draw broken lines to form two triangles in each figure.



Activity 3: Describe Me

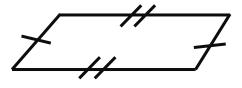
I. Directions: Describe the figures by filling the blanks with the correct answer.



This is a ______ It has _____ pairs of opposite parallel sides.

It has _____ corners/vertices.

It has _____ right angles.



This is a _____.

It has _____ pairs of opposite parallel sides.

It has _____ corners/vertices.

It has no right angles.

II. Directions: Use the descriptions of the figures above to show their relationship. Write your answer below.



Activity 4: Fill Me

A. Directions: Fill in the blanks to complete the statement.

1. A polygon with three sides, 3 vertices and three angles is called _____. It

can be made from some _____.

2. A polygon with four sides and four angles is called_____. It can be divided

into _____.

3. The square, rhombus, rectangle, trapezoid, isosceles trapezoid, and kite are

called _____.

4. Quadrilaterals have four sides and four vertices. They are related to each other

in some of their _____.



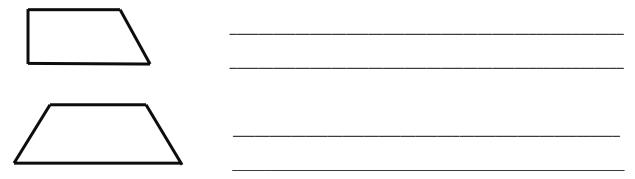
Activity 5: Trace Me

Directions: Trace and cut the triangles below. Put together the triangle cutouts to form quadrilaterals. Write the name of the quadrilateral that is being formed.

Example:	V . / .	rhombus
TRIANGLES	QUADRILATERAL FORMED	NAME OF QUADRILATERAL
3.		

Activity 6: Describe and Relate Me

A. Directions: Look at the figures below and describe each of them.

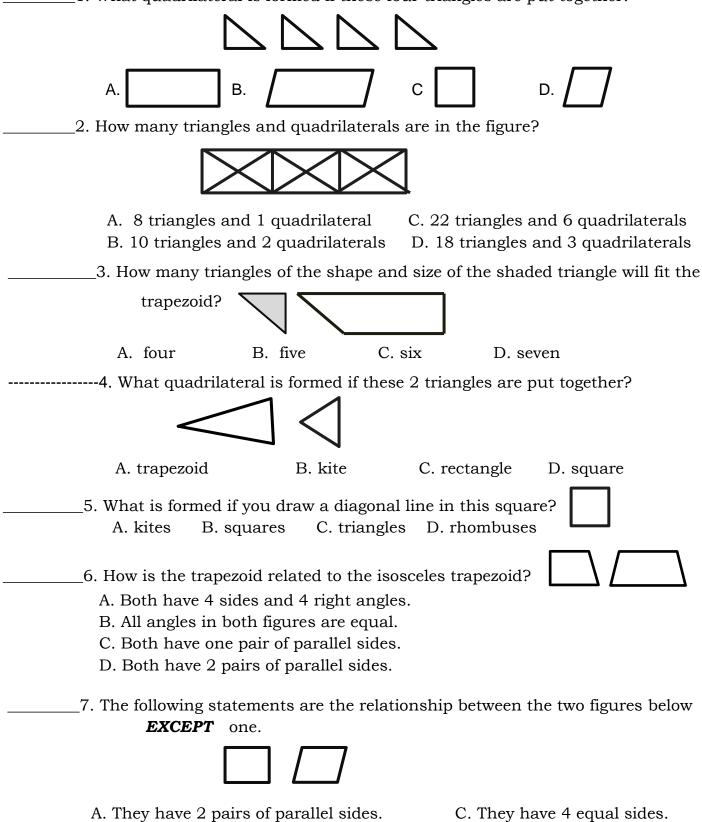


B. Directions: Use the descriptions that you made to show the relationships of the figures above.



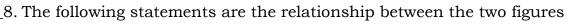
Directions: Read each item carefully. Write the letter of your answer on the space before the number.

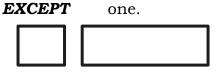
1. What quadrilateral is formed if these four triangles are put together?



B. They have 4 right angles.

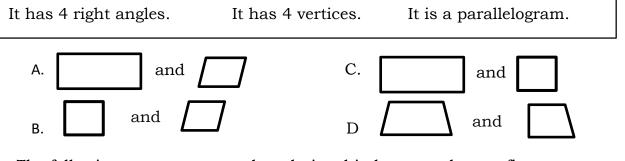
D. They are quadrilaterals.



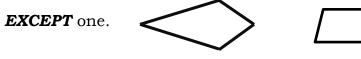


A. They have 4 right angles.C. They are quadrilaterals.

- B. They have 4 equal sides.D. They are parallelogram.
- _9. Which two figures are related with these characteristics?



10. The following statements are the relationship between the two figures



A. They have 4 sides and 4 angles.

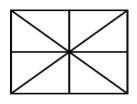
- C. They have 4 equal sides.
- B. They have 4 corners/vertices
- D. They are quadrilaterals.



Additional Activities

Activity 7: Count Me

Directions: Study the figure and answer the question below.



How many quadrilaterals and triangles are in the figure?

_____ Triangles

_____ Quadrilaterals

Activity 8: Find Me

Directions: Look for 2 objects in your home that look like a quadrilateral. Describe how they are related to each other. Write your answer below

References

A. Book

Chingcuangco, Ofelia G., M.A. Ed *Soaring High with Mathematics 4*.edited by Fedirico C. Castillo,Ed.dQuezon City: Saint Matthews Publishing, 2019.

B. Web Links

https://creazilla.com/nodes/38123-reception-woman-clipart

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