

# TABE Math-E

# PAXEN

Unit-6 Geometry
Lesson 42
2-Dimensional Shapes

Revised: November 4, 2023 Nolan Tomboulian

Some graphics may not have copied well during the scan process.

# Math-E - Lesson 42 — 2-Dimensional Shapes

Geometry

#### 2-Dimensional Shapes

Shapes that have only length and width are called two-dimensional shapes. They have no thickness and are flat. Two-dimensional shapes are formed by points connected by line segments, curved paths, or both. For example, a circle is a two-dimensional shape made by drawing a curved path that is always the same distance from a center point.

Two-dimensional shapes are named and categorized by the numbers of angles and sides they have.











Some quadrilaterals are named.





Example What is the shape of the sign?



1) Count the number of sides and angles in the shape.

There are 5 sides and 5 angles.

2) Identify the shape.

A 5-sided polygon is called a pentagon.

Which shape is a quadrilateral?





- **C** A rectangle is a quadrilateral. It has four sides and four angles. The other shapes have either three or five sides and angles.

## Math-E - Lesson 42 — 2-Dimensional Shapes

#### Practice Read each question. Select the correct answer. How many sides and angles does a What shape are the black patches on the soccer ball? triangle have? A. 3 sides and 3 angles B. 4 sides and 4 angles C. 5 sides and 5 angles D. 6 sides and 6 angles A. hexagon B. pentagon What is the name of this shape? C. rectangle D. triangle What shape is the plate below? A. hexagon B. pentagon C. quadrilateral D. triangle A. square Which shape has 6 sides and 6 angles? B. rectangle A. hexagon C. pentagon B. pentagon D. hexagon C. quadrilateral D. triangle Which shape does **NOT** belong in the group? Which shape is also a quadrilateral? A. hexagon B. pentagon C. square D. triangle This highway sign is the shape of a rectangle. What is another name for this shape? **FALLING** ROCKS A. square B. quadrilateral C. pentagon D. hexagon

## Math-E - Lesson 42 — 2-Dimensional Shapes

### Lesson 42

#### 2-Dimensional Shapes

(2.G.1)

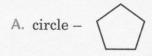
- 1. A. A triangle has 3 sides and 3 angles.
- 2. D. The shape has 3 sides and 3 angles, so it is a triangle.
- 3. A. The shape with 6 sides and 6 angles is a hexagon.
- 4. C. A square is a special type of quadrilateral.
- 5. B. A rectangle is also a quadrilateral.
- 6. B. A black patch has 5 sides and 5 angles, so it is a pentagon.
- 7. D. The plate has 6 sides and 6 angles, so it is a hexagon.
- **8.** C. All of the shapes have straight sides except the circle.

## Math-E - Practice 42 — 2-Dimensional Shapes

#### Practice 42 2-Dimensional Shapes

2.G.1 - Medium

- How many sides and angles does a pentagon have?
  - A. 3 sides and 3 angles
  - B. 4 sides and 4 angles
  - C. 5 sides and 5 angles
  - D. 6 sides and 6 angles
- Which two of these correctly match the shape with the name?



- B. triangle -
- C. hexagon -
- D. rectangle -
- E. pentagon -
- F. quadrilateral -
- Chidi is repairing a chair and uses a nut for a bolt as shown. What shape is the nut?



- A. hexagon
- B. pentagon
- C. quadrilateral
- D. rectangle

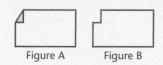
Dericia is looking for a wheelchairaccessible parking spot. She parks in a spot with the sign shown. What shape is the wheel?



- A. circle
- B. hexagon
- C. triangle
- D. rectangle

Use the information to answer questions 5 through 7.

A piece of paper has one edge folded back as shown in Figure A. Another piece of paper has a corner removed as shown in Figure B.



- Which word describes the outside shape of Figure A, the paper with the folded edge?
  - A. circle
- B. square
- C. rectangle
- D. pentagon
- 6 Which word describes the shape of the folded edge in Figure A?
  - A. square
- B. triangle
- C. pentagon
- D. hexagon
- Which word describes the shape of Figure B, the paper with the edge removed?
  - A. square
  - B. rectangle
  - C. hexagon
  - D. pentagon

## Math-E - Practice 42 — 2-Dimensional Shapes

Notah is waiting to see his doctor for his yearly exam. In the exam room, he sees a "No cell phone" sign posted. What shape is the sign?



- A. square
- B. circle
- C. triangle
- D. quadrilateral
- 9 Hialeah uses the drafting tool shown to draw blueprints at work. What shape is the drafting tool?



- A. square
- B. triangle
- C. hexagon
- D. pentagon

Use the drawing of an envelope to answer question 10.



#### 10 Part A

Which two words describe the outside of this shape?

- A. circle
- B. square
- C. rectangle
- D. hexagon
- E. pentagon
- F. quadrilateral

#### Part B

Which word describes the shaded shape on the envelope?

- A. square
- B. hexagon
- C. rectangle
- D. triangle

This road sign warns drivers that roads are slippery when wet. What is the shape of the road sign?



- A. circle
- B. quadrilateral
- C. triangle
- D. rectangle
- Which shape does **NOT** belong in the group?



В.

	Г	_	 -	
-	-			
6.	1			



Use the information to answer questions 13 through 15.

Koa designs a new logo for his business cards.

Which word describes the outside shape of the logo?



- A. hexagon
- B. rectangle
- C. square
- D. pentagon
- Which word describes the shaded shapes in the top part of the logo?



- A. triangles
- B. squares
- C. quadrilaterals
- D. rectangles
- Which word describes the shaded shapes in the bottom part of the logo?



- A. triangles
- B. circles
- C. squares
- D. pentagons

## Math-E - Practice 42 — 2-Dimensional Shapes

#### Practice 42 2-Dimensional Shapes

pp. 26-27

(2.G.1)

- 1. C. A pentagon has 5 sides and 5 angles.
- 2. C, F. A hexagon has 6 sides and 6 angles. A quadrilateral has 4 sides and 4 angles.
- 3. A. The nut has 6 sides and 6 angles, so it is a hexagon.
- 4. A. The wheel is a two-dimensional shape made by drawing a curved path that is always the same distance from a center point, so it is a circle.
- 5. D. The outside of Figure A has 5 sides and 5 angles, so it is a pentagon.
- 6. B. The folded section of Figure A has 3 sides and 3 angles, so it is a triangle.
- 7. C. The outside of Figure B has 6 sides and 6 angles, so it is a hexagon.
- 8. B. The sign is a two-dimensional shape made by drawing a curved path that is always the same distance from a center point, so it is a circle.
- 9. B. The drafting tool has 3 sides and 3 angles, so it is a triangle.
- 10. Part A: C, F. The shape has 4 sides and 4 angles, so it is both a rectangle and a quadrilateral.
  - Part B: D. The shape has 3 sides and 3 angles, so it is a triangle.
- 11. C. The road sign has 3 sides and 3 angles, so it is a triangle.
- 12. B. The hexagon has 6 sides and 6 angles. The other shapes have 4 sides and 4 angles.
- 13. D. The shape has 5 sides and 5 angles, so it is a pentagon.
- 14. C. The shapes have 4 sides and 4 angles, so they are quadrilaterals.
- 15. A. The shapes have 3 sides and 3 angles, so they