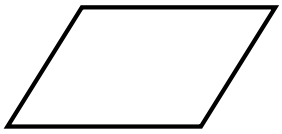
TEKS 4.6(D) Classifying 2-D Figures

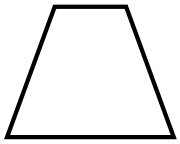
Question 1

Which figure appears to have exactly one pair of parallel sides and no right angles?

A

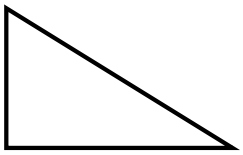


B



C

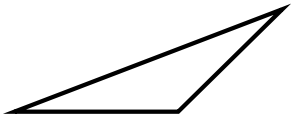
D



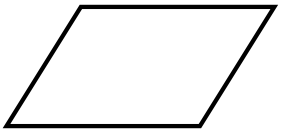
Question 2

Which figure appears to have at least one pair of perpendicular sides?

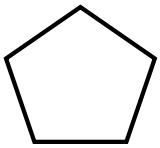
A



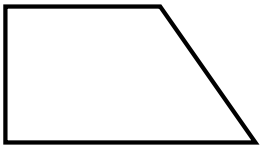
B



C



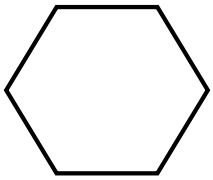
D



TEKS 4.6(D) Classifying 2-D Figures

Question 3

Look at the figure below.



How many pairs of parallel sides does the figure appear to have?

A 0

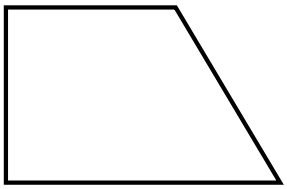
B 2

C 3

D 6

Question 4

Look at the figure below.



Which statement about the figure appears to be true?

A It has exactly one pair of parallel sides and at least one pair of perpendicular sides.

B It has no parallel sides and no perpendicular sides.

C It has two pairs of parallel sides.

D It has parallel sides but no perpendicular sides.

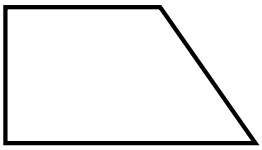
TEKS 4.6(D) Classifying 2-D Figures

Question 5

Which figure appears to have no parallel sides and no perpendicular sides?

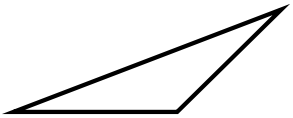
A

B



C

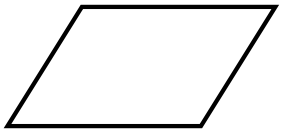
D



Question 6

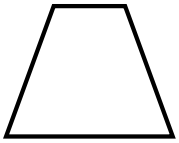
Which figure appears to have two pairs of parallel sides and no right angles?

A

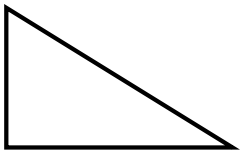


B

C



D

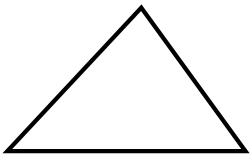


TEKS 4.6(D) Classifying 2-D Figures

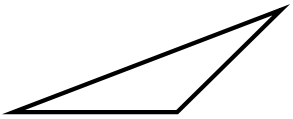
Question 7

Which figure appears to have exactly one obtuse angle?

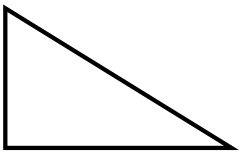
A



B



C

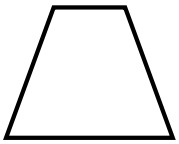


D

Question 8

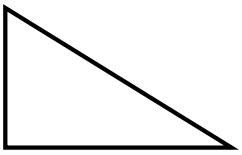
Jaylen sorts figures into a group. Every figure in the group has at least one pair of perpendicular sides and NO parallel sides. Which figure belongs in Jaylen's group?

A

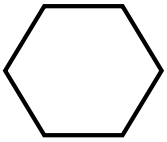


B

C



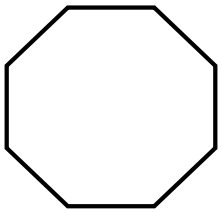
D



TEKS 4.6(D) Classifying 2-D Figures

Question 9

Look at the figure below.

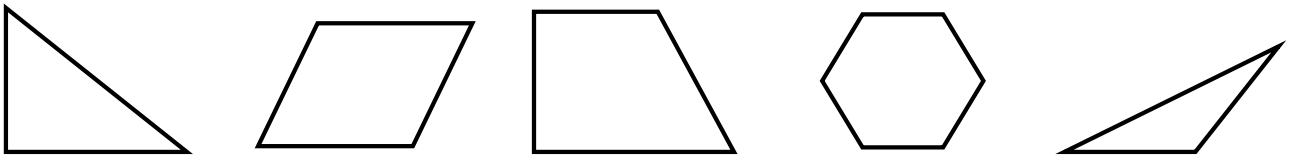


How many pairs of parallel sides does the figure appear to have?

Record your answer in the box below.

Question 10

Select TWO figures that appear to have at least one pair of perpendicular sides.



☐ ☐ ☐ ☐ ☐

Answer Key

1. **B — the trapezoid**

   The trapezoid has exactly one pair of parallel sides (top and bottom) and no right angles. A (parallelogram) has two pairs of parallel sides. C (rectangle) has right angles. D (right triangle) has no parallel sides.

2. **D — the right trapezoid**

   The left side of the right trapezoid meets the top and bottom sides at right angles, so it has perpendicular sides. The obtuse triangle, parallelogram, and regular pentagon have no right angles.

3. **C — 3**

   A regular hexagon has 6 sides, and each side is parallel to the side directly across from it: 6 ÷ 2 = 3 pairs of parallel sides.

4. **A**

   The top and bottom sides are parallel (one pair), and the left side is perpendicular to both the top and the bottom. So the figure has exactly one pair of parallel sides AND perpendicular sides.

5. **D — the obtuse triangle**

   No two sides of the obtuse triangle are parallel, and none of its angles is a right angle, so no sides are perpendicular. The rectangle, right trapezoid, and square all have parallel and perpendicular sides.

6. **A — the parallelogram**

   A parallelogram has two pairs of parallel sides. Because this one is slanted, it has no right angles. B (rectangle) has right angles. C (trapezoid) has only one pair of parallel sides. D (right triangle) has none.

7. **B — the obtuse triangle**

   The obtuse triangle has one angle greater than 90° and two acute angles. The acute triangle has all angles less than 90°; the right triangle's largest angle is exactly 90°; the rectangle's angles are all exactly 90°.

8. **C — the right triangle**

   The right triangle's two legs meet at a right angle (perpendicular sides), and a triangle can never have parallel sides. A (trapezoid) and D (hexagon) have parallel sides; B (square) has perpendicular AND parallel sides, so it does not fit the group.

9. **4**

   A regular octagon has 8 sides, and each side is parallel to the side directly across from it: 8 ÷ 2 = 4 pairs of parallel sides.

10. **Figure 1 (right triangle) AND Figure 3 (right trapezoid)**

    The right triangle's legs are perpendicular ✔. The right trapezoid's left side is perpendicular to its parallel sides ✔. The parallelogram, regular hexagon, and obtuse triangle have no right angles ✗.