

# Unit: 5<sup>th</sup> – Geometry

## Lesson: Classify 2D Figures

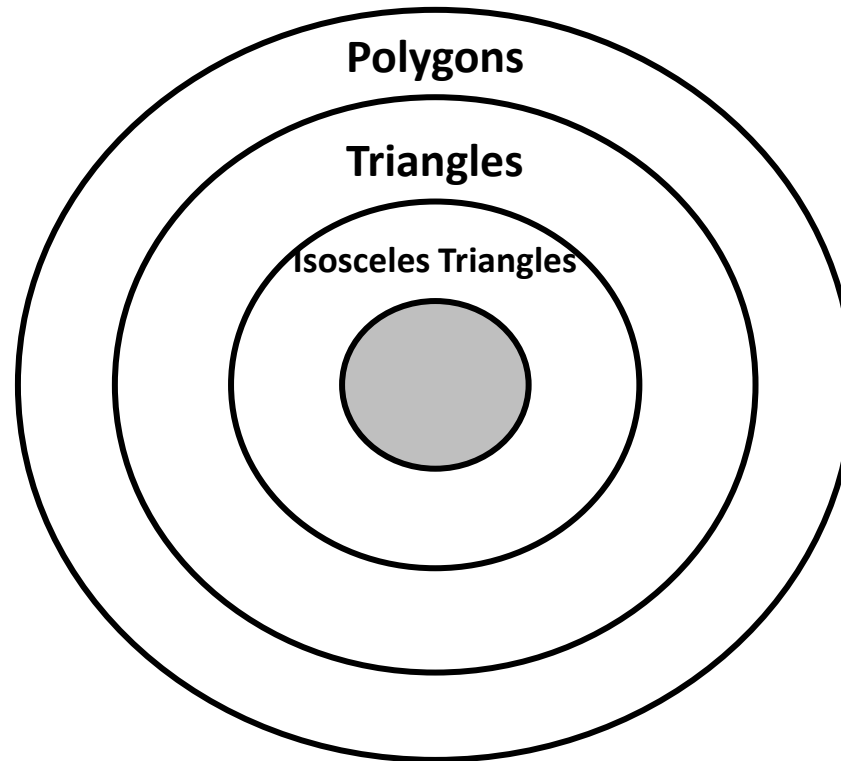
### Problem Set 1

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|         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|
| 1<br>C  | 2<br>D  | 3<br>A  | 4<br>B  | 5<br>C  | 6<br>B  |
| 7<br>A  | 8<br>B  | 9<br>D  | 10<br>C | 11<br>A | 12<br>B |
| 13<br>C | 14<br>B | 15<br>C | 16<br>C | 17<br>B | 18<br>D |
| 19<br>A | 20<br>C | 21<br>A | 22<br>A | 23<br>C | 24<br>D |
| 25<br>C | 26<br>B | 27<br>A | 28<br>B | 29<br>A | 30<br>D |



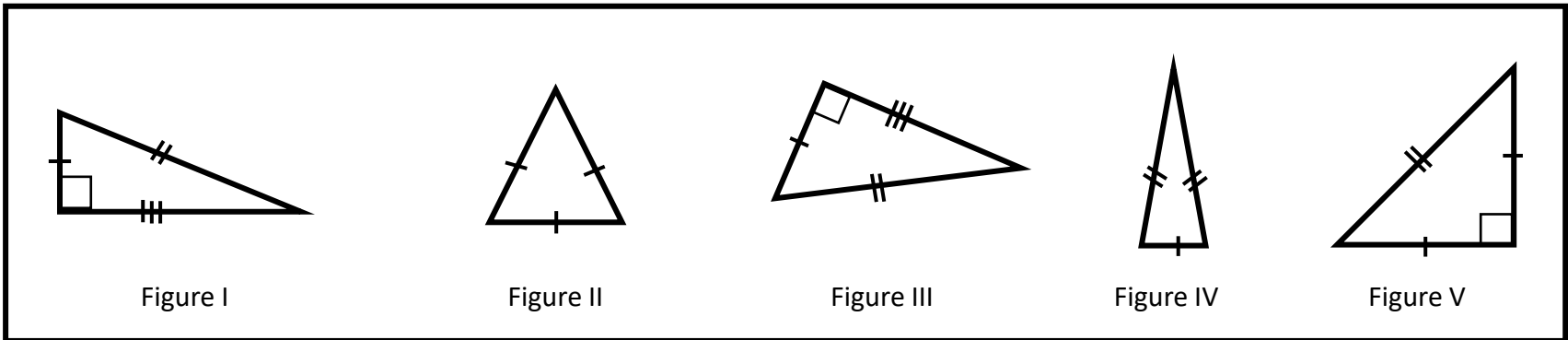
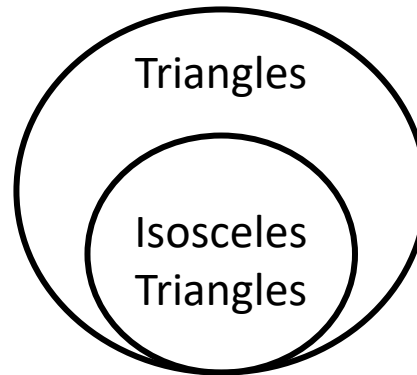
1. In the diagram shown, each circle represents a group of 2-dimensional figures. If a figure belongs in a circle, it also belongs in any larger circle.



Which kind of figures belong in the shaded circle?

- A. Right Triangles
- B. Scalene Triangles
- C. Equilateral Triangles
- D. Obtuse Triangles

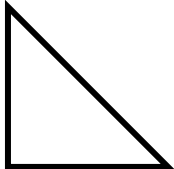
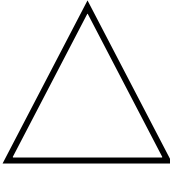
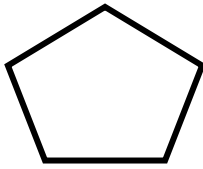
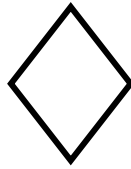


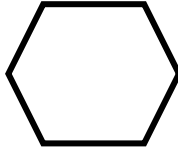

2. A student used this graphic organizer to classify different figures.



Which figures belong in the part of the organizer labeled “Isosceles Triangles”?

- A. Figures II and V only
- B. Figures I, III, and V only
- C. Figures I and III only
- D. Figures II, IV and V only

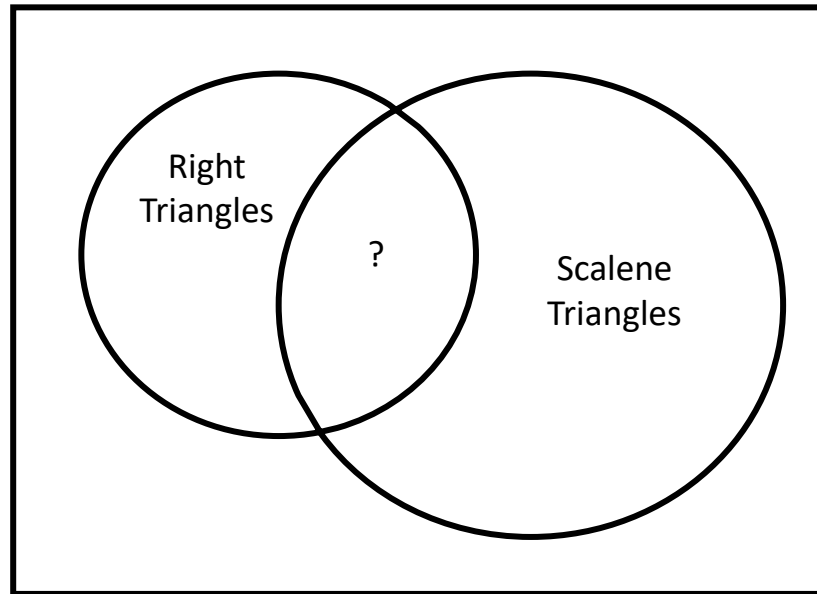
3. Ronette classified shapes based on the types of angles they had. The table shows her classifications.

| Right Angles Only                                                                            | Acute Angles Only                                                                            | Obtuse Angles Only                                                                             | Both Acute and Obtuse Angles                                                                   |
|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| <br>Shape 1 | <br>Shape 3 | <br>Shape 5 | <br>Shape 7 |
| <br>Shape 2 | <br>Shape 4 | <br>Shape 6 | <br>Shape 8 |

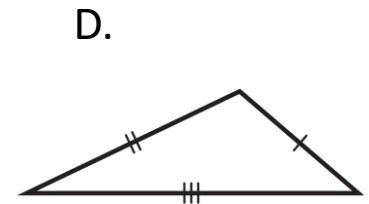
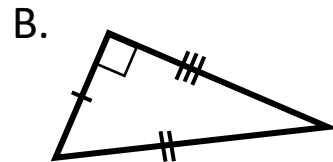
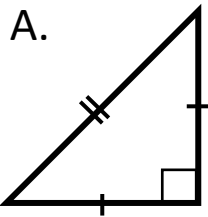
Which shape was NOT classified correctly?

- A. Shape 1
- B. Shape 3
- C. Shape 5
- D. Shape 7

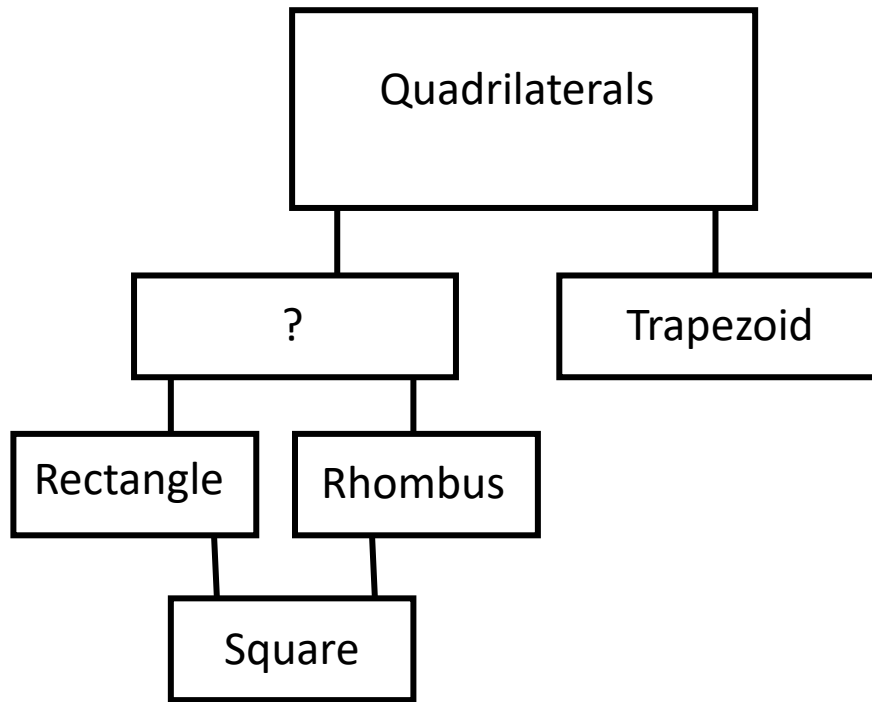
4. This Venn diagram shows the relationship between some types of triangles.



Which triangle belongs in the intersection of "Acute triangles" and "Isosceles triangles"?



5. Akshar is making a mobile that lists quadrilaterals.






What is the name of the subset of quadrilaterals missing from Akshar's mobile?




- A. Hexagon
- B. Polygon
- C. Parallelogram
- D. Triangle

6. In which table are the check marks placed in all the correct boxes?



A.

|                                                                                   | Quadrilateral | Parallelogram | Rectangle |
|-----------------------------------------------------------------------------------|---------------|---------------|-----------|
|  |               |               | ✓         |
|  | ✓             |               | ✓         |
|  | ✓             | ✓             | ✓         |




B.

|                                                                                     | Quadrilateral | Parallelogram | Rectangle |
|-------------------------------------------------------------------------------------|---------------|---------------|-----------|
|  | ✓             | ✓             |           |
|  | ✓             |               |           |
|  | ✓             | ✓             | ✓         |

C.

|                                                                                     | Quadrilateral | Parallelogram | Rectangle |
|-------------------------------------------------------------------------------------|---------------|---------------|-----------|
|   | ✓             |               |           |
|  | ✓             |               |           |
|  | ✓             | ✓             |           |

D.

|                                                                                       | Quadrilateral | Parallelogram | Rectangle |
|---------------------------------------------------------------------------------------|---------------|---------------|-----------|
|   |               |               | ✓         |
|  | ✓             |               | ✓         |
|  | ✓             | ✓             | ✓         |



# Unit: 5<sup>th</sup> – Geometry

## Lesson: Classify 2D Figures

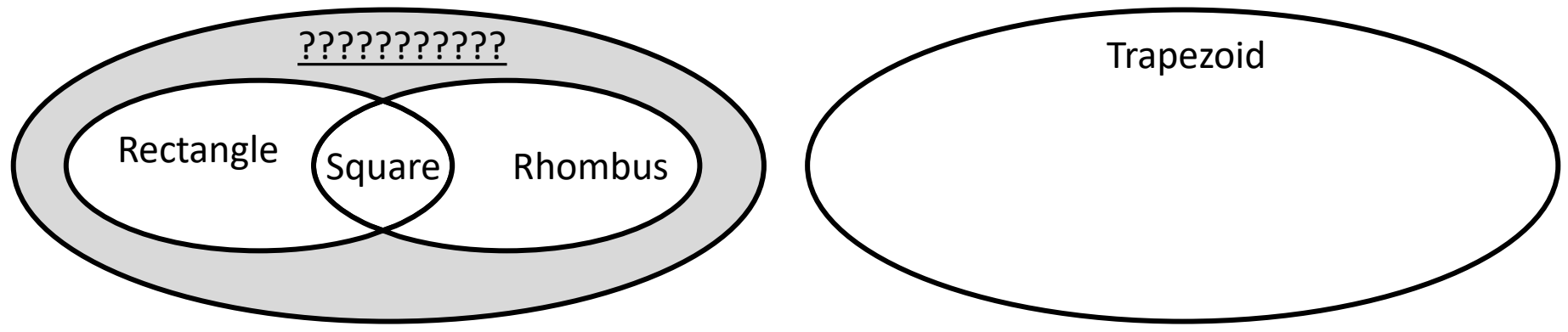
### Problem Set 2

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|                    |                    |                    |                    |                    |                    |
|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| <b>1</b><br><br>C  | <b>2</b><br><br>D  | <b>3</b><br><br>A  | <b>4</b><br><br>B  | <b>5</b><br><br>C  | <b>6</b><br><br>B  |
| <b>7</b><br><br>A  | <b>8</b><br><br>B  | <b>9</b><br><br>D  | <b>10</b><br><br>C | <b>11</b><br><br>A | <b>12</b><br><br>B |
| <b>13</b><br><br>C | <b>14</b><br><br>B | <b>15</b><br><br>C | <b>16</b><br><br>C | <b>17</b><br><br>B | <b>18</b><br><br>D |
| <b>19</b><br><br>A | <b>20</b><br><br>C | <b>21</b><br><br>A | <b>22</b><br><br>A | <b>23</b><br><br>C | <b>24</b><br><br>D |
| <b>25</b><br><br>C | <b>26</b><br><br>B | <b>27</b><br><br>A | <b>28</b><br><br>B | <b>29</b><br><br>A | <b>30</b><br><br>D |



7. Quadrilaterals can be classified using the graphic organizer shown.



Which term best classified the shapes that belong in the shaded section of the organizer?

- A. Parallelogram
- B. Polygon
- C. Pentagon
- D. None of these

8. This graphic organizer is being used to classify triangles based on their angle measures or side lengths.

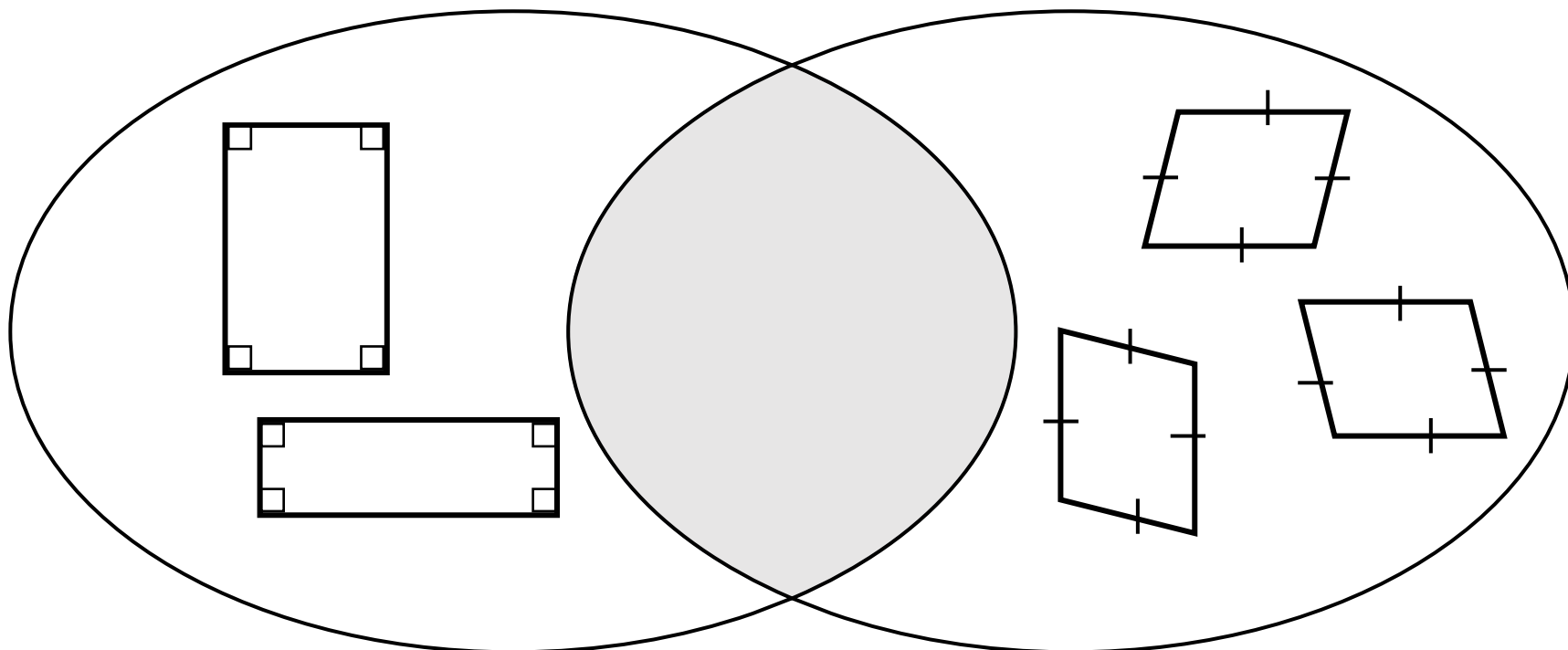
| Angle Measure Classification |       |        | Side Length Classification |             |         |
|------------------------------|-------|--------|----------------------------|-------------|---------|
| Acute                        | Right | Obtuse | Isosceles                  | Equilateral | Scalene |

Which list shows all the ways this triangle could be classified?



- A. Right only
- B. Right and Scalene
- C. Right, Obtuse and Scalene only
- D. Acute, isosceles, and equilateral


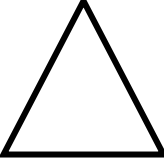
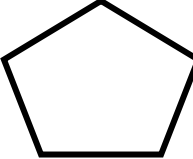
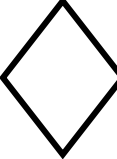

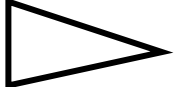


9. This Venn diagram is being used to classify two types of quadrilaterals.



Which type of figure will always belong in the shaded section of this Venn diagram?

- A. Rectangle
- B. Rhombus
- C. Trapezoid
- D. Square

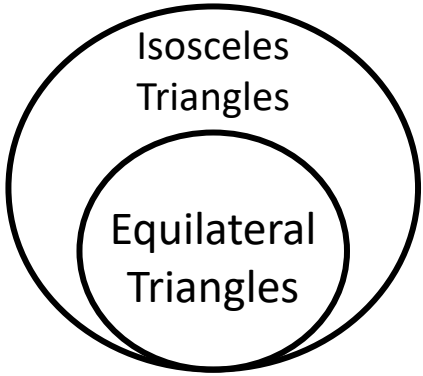
10. Ronald classified shapes based on the types of angles they had. The table shows his classifications.

| Right Angles Only                                                                            | Acute Angles Only                                                                            | Obtuse Angles Only                                                                             | Both Acute and Obtuse Angles                                                                   |
|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| <br>Shape 1 | <br>Shape 3 | <br>Shape 5 | <br>Shape 7 |
| <br>Shape 2 | <br>Shape 4 | <br>Shape 6 | <br>Shape 8 |

Which shape was NOT classified correctly?

- A. Shape 4
- B. Shape 5
- C. Shape 6
- D. Shape 8

11. A student used this graphic organizer to classify different figures.

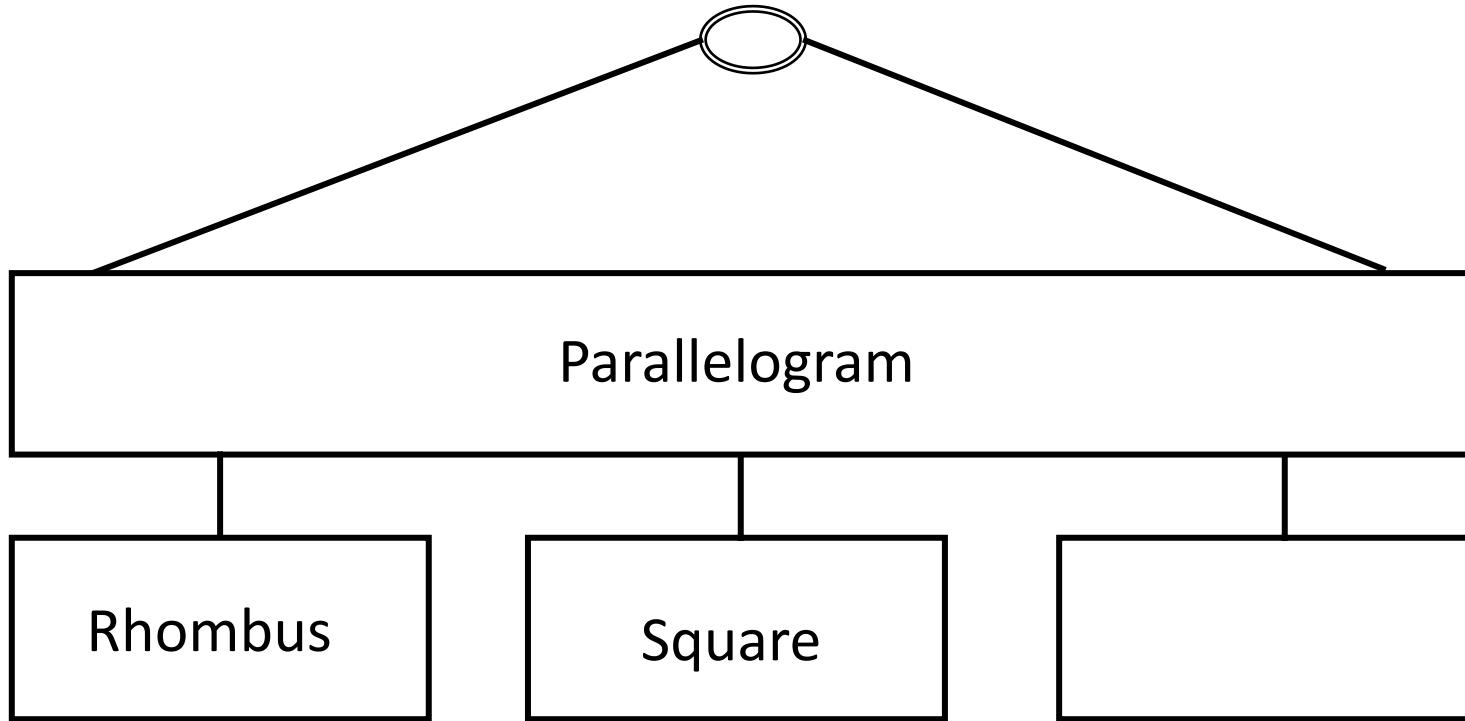


|          |           |            |           |          |
|----------|-----------|------------|-----------|----------|
|          |           |            |           |          |
| Figure I | Figure II | Figure III | Figure IV | Figure V |

Which figures belong in the part of the organizer labeled “Isosceles Triangles”?

- A. Figure II only
- B. Figures I, III, and V only
- C. Figures I and III only
- D. Figures II, IV and V only

12. Nellie built the hanging mobile shown in the picture to show some relationships among shapes.



Which shape goes in the empty box to complete Nellie's mobile?

- A. Trapezoid
- B. Rectangle
- C. Quadrilateral
- D. Triangle



# Unit: 5<sup>th</sup> – Geometry

## Lesson: Classify 2D Figures

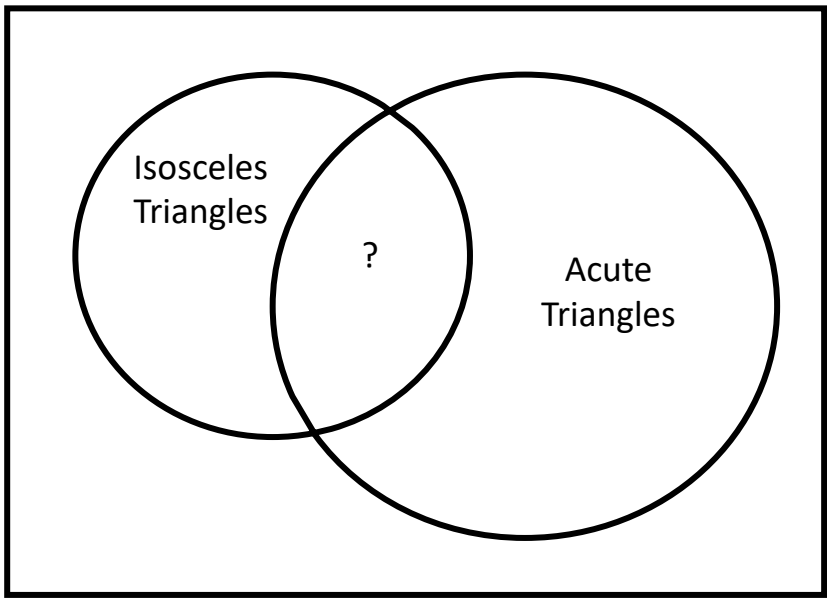
### Problem Set 3

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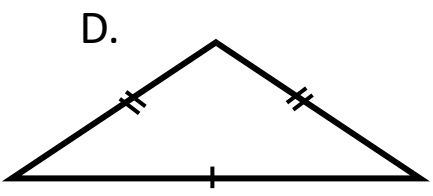
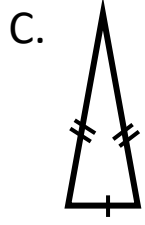
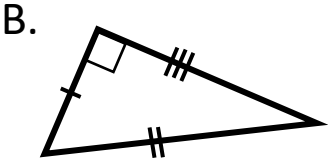
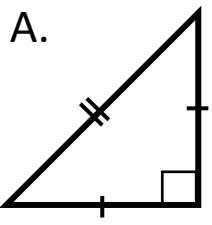
|                    |                    |                    |                    |                    |                    |
|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| <b>1</b><br><br>C  | <b>2</b><br><br>D  | <b>3</b><br><br>A  | <b>4</b><br><br>B  | <b>5</b><br><br>C  | <b>6</b><br><br>B  |
| <b>7</b><br><br>A  | <b>8</b><br><br>B  | <b>9</b><br><br>D  | <b>10</b><br><br>C | <b>11</b><br><br>A | <b>12</b><br><br>B |
| <b>13</b><br><br>C | <b>14</b><br><br>B | <b>15</b><br><br>C | <b>16</b><br><br>C | <b>17</b><br><br>B | <b>18</b><br><br>D |
| <b>19</b><br><br>A | <b>20</b><br><br>C | <b>21</b><br><br>A | <b>22</b><br><br>A | <b>23</b><br><br>C | <b>24</b><br><br>D |
| <b>25</b><br><br>C | <b>26</b><br><br>B | <b>27</b><br><br>A | <b>28</b><br><br>B | <b>29</b><br><br>A | <b>30</b><br><br>D |



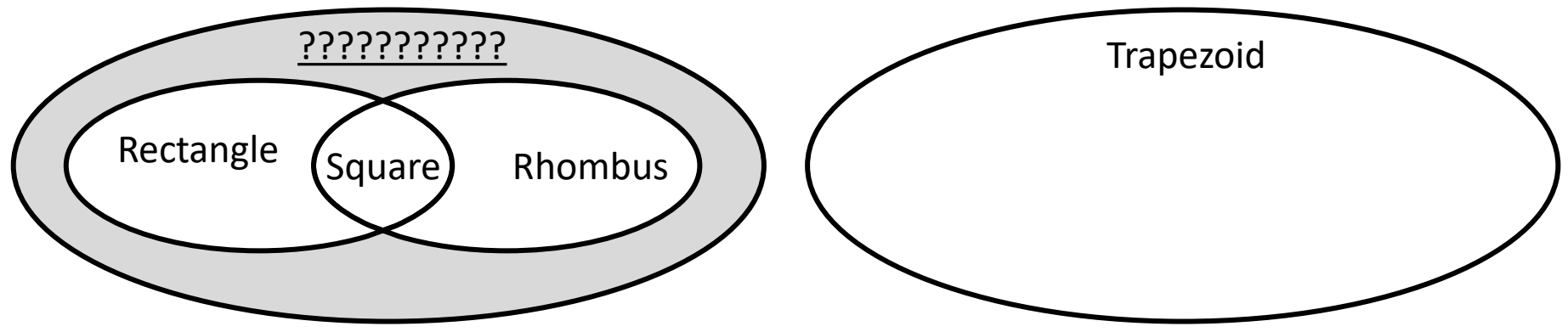
13. This Venn diagram shows the relationship between some types of triangles.



Which triangle belongs in the intersection of "Acute triangles" and "Isosceles triangles"?



14. Quadrilaterals can be classified using the graphic organizer shown.



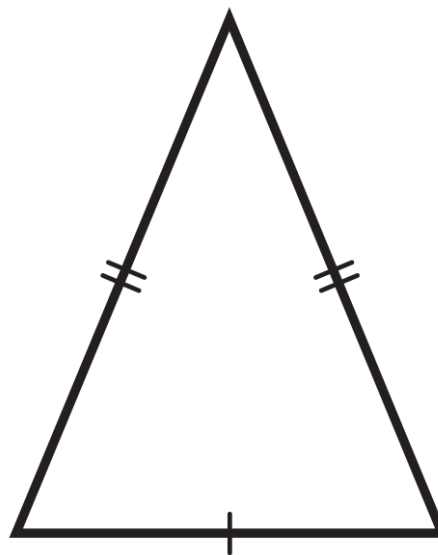
Which term best classified the shapes that belong in the shaded section of the organizer?

- A. Polygon
- B. Parallelogram
- C. Pentagon
- D. None of these

15. This graphic organizer is being used to classify triangles based on their angle measures or side lengths.

| Angle Measure Classification |       |        | Side Length Classification |             |         |
|------------------------------|-------|--------|----------------------------|-------------|---------|
| Acute                        | Right | Obtuse | Isosceles                  | Equilateral | Scalene |




Which list shows all the ways this triangle could be classified?






- A. Acute only
- B. Equilateral only
- C. Acute and isosceles only
- D. Acute, isosceles, and equilateral

16. In which table are the check marks placed in all the correct boxes?




A.

|                                                                                   | Quadrilateral | Rhombus | Polygon |
|-----------------------------------------------------------------------------------|---------------|---------|---------|
|  |               |         | ✓       |
|  |               |         | ✓       |
|  | ✓             |         | ✓       |



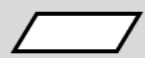
B.

|                                                                                     | Quadrilateral | Rhombus | Polygon |
|-------------------------------------------------------------------------------------|---------------|---------|---------|
|  | ✓             |         |         |
|  |               |         |         |
|  | ✓             |         |         |

C.

|                                                                                     | Quadrilateral | Rhombus | Polygon |
|-------------------------------------------------------------------------------------|---------------|---------|---------|
|    | ✓             | ✓       | ✓       |
|   |               |         | ✓       |
|  | ✓             |         | ✓       |

D.

|                                                                                       | Quadrilateral | Rhombus | Polygon |
|---------------------------------------------------------------------------------------|---------------|---------|---------|
|    |               |         |         |
|   |               |         | ✓       |
|  |               |         | ✓       |

17. A student used this graphic organizer to classify different figures.

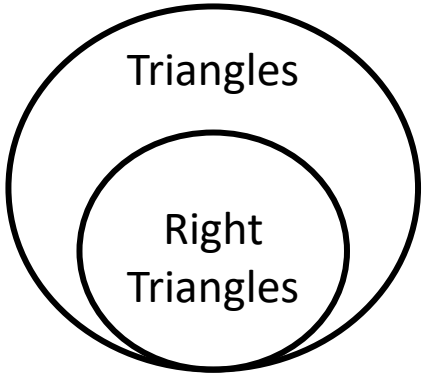


Figure I: A right-angled triangle with a right angle symbol at the bottom-left vertex. The left vertical leg has a single tick mark, the bottom horizontal leg has a triple tick mark, and the hypotenuse has a double tick mark.

Figure II: An equilateral triangle with a single tick mark on each of its three sides.

Figure III: A right-angled triangle with a right angle symbol at the top vertex. The left vertical leg has a single tick mark, the bottom horizontal leg has a double tick mark, and the hypotenuse has a triple tick mark.

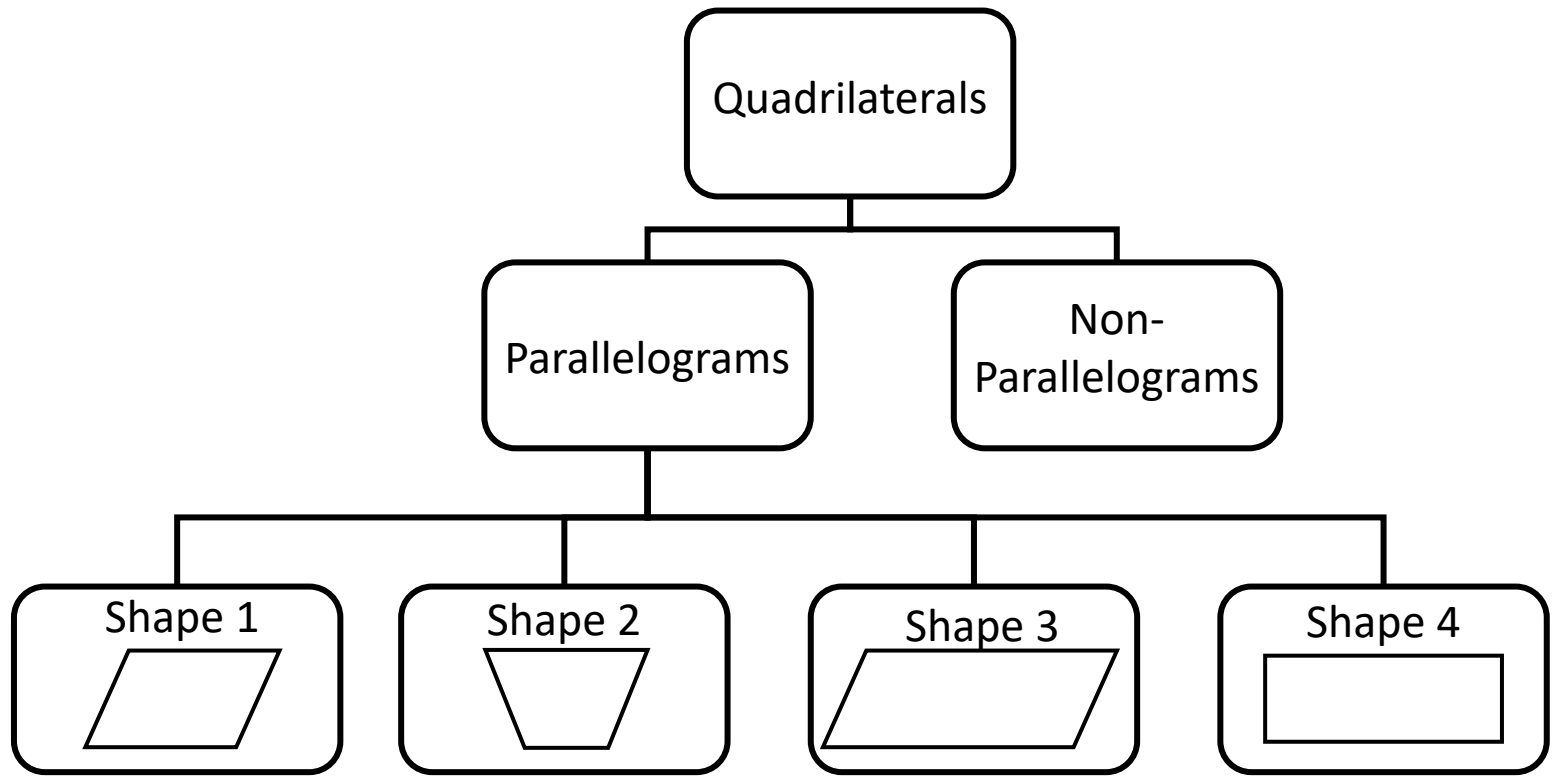
Figure IV: An isosceles triangle with a single tick mark on the bottom horizontal base and double tick marks on the two slanted sides.

Figure V: A right-angled triangle with a right angle symbol at the bottom-right vertex. The bottom horizontal leg has a single tick mark, the right vertical leg has a single tick mark, and the hypotenuse has a double tick mark.

Which figures belong in the part of the organizer labeled “Isosceles Triangles”?

- A. Figures II and V only
- B. Figures I, III, and V only
- C. Figures I and III only
- D. Figures II, IV and V only

18. In which table are the check marks placed in all the correct boxes?



Which shapes appear to be classified correctly?

- A. Shapes 1 and 3 only
- B. Shapes 2 and 4
- C. Shapes 1,2, and 3
- D. Shapes 1,3, and 4



# Unit: 5<sup>th</sup> – Geometry

## Lesson: Classify 2D Figures

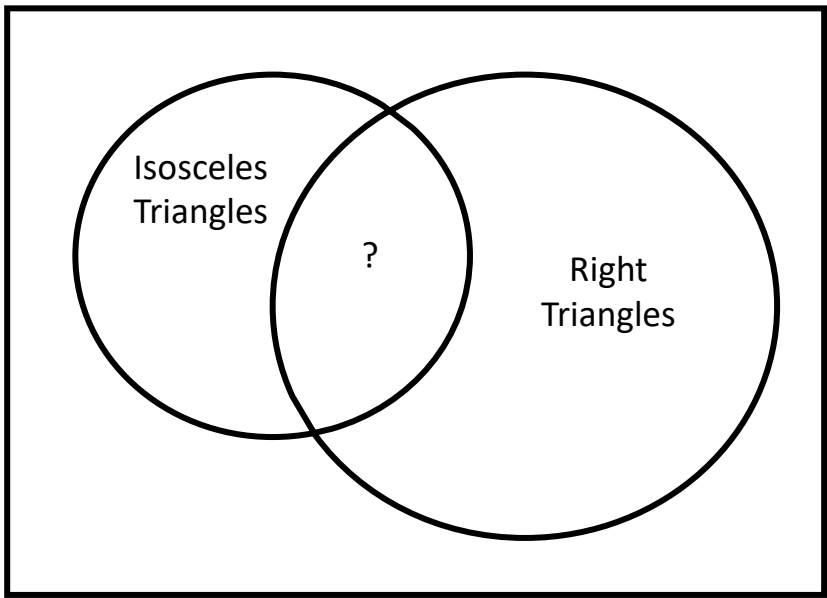
### Problem Set 4

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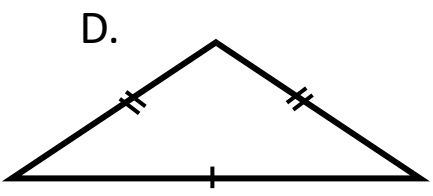
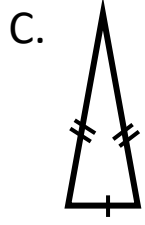
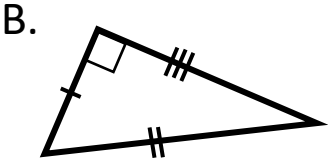
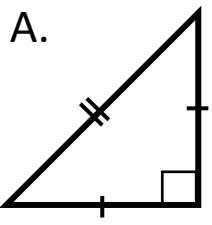
|                |                |                |                |                |                |
|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>1</b><br>C  | <b>2</b><br>D  | <b>3</b><br>A  | <b>4</b><br>B  | <b>5</b><br>C  | <b>6</b><br>B  |
| <b>7</b><br>A  | <b>8</b><br>B  | <b>9</b><br>D  | <b>10</b><br>C | <b>11</b><br>A | <b>12</b><br>B |
| <b>13</b><br>C | <b>14</b><br>B | <b>15</b><br>C | <b>16</b><br>C | <b>17</b><br>B | <b>18</b><br>D |
| <b>19</b><br>A | <b>20</b><br>C | <b>21</b><br>A | <b>22</b><br>A | <b>23</b><br>C | <b>24</b><br>D |
| <b>25</b><br>C | <b>26</b><br>B | <b>27</b><br>A | <b>28</b><br>B | <b>29</b><br>A | <b>30</b><br>D |



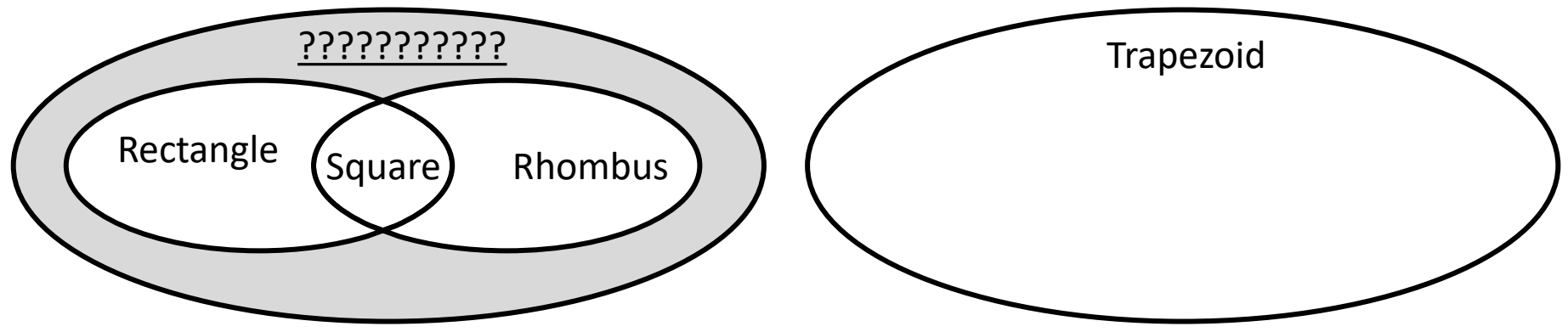
19. This Venn diagram shows the relationship between some types of triangles.



Which triangle belongs in the intersection of "Acute triangles" and "Isosceles triangles"?



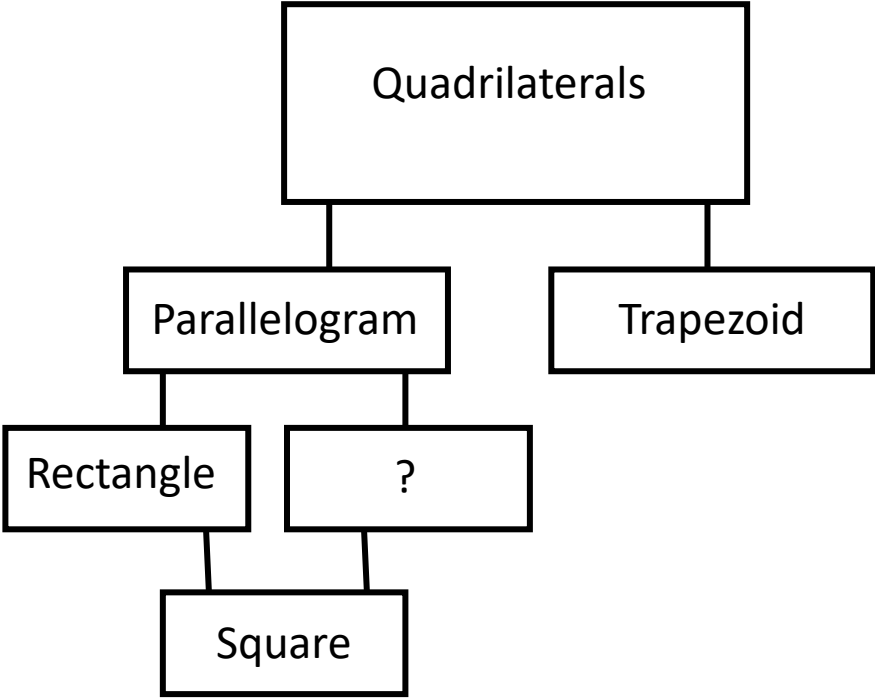
20. Quadrilaterals can be classified using the graphic organizer shown.



Which term best classified the shapes that belong in the shaded section of the organizer?

- A. Pentagon
- B. Polygon
- C. Parallelogram
- D. None of these

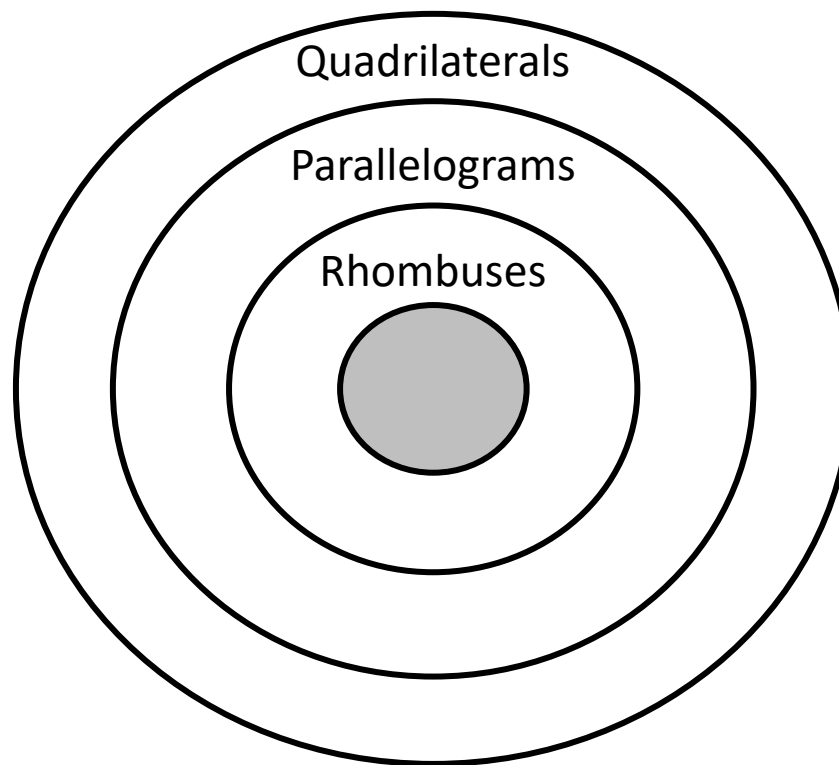
21. Arnold is making a mobile that lists quadrilaterals.



What is the name of the subset of quadrilaterals missing from Arnold's mobile?

- A. Rhombus
- B. Polygon
- C. Pentagon
- D. Triangle

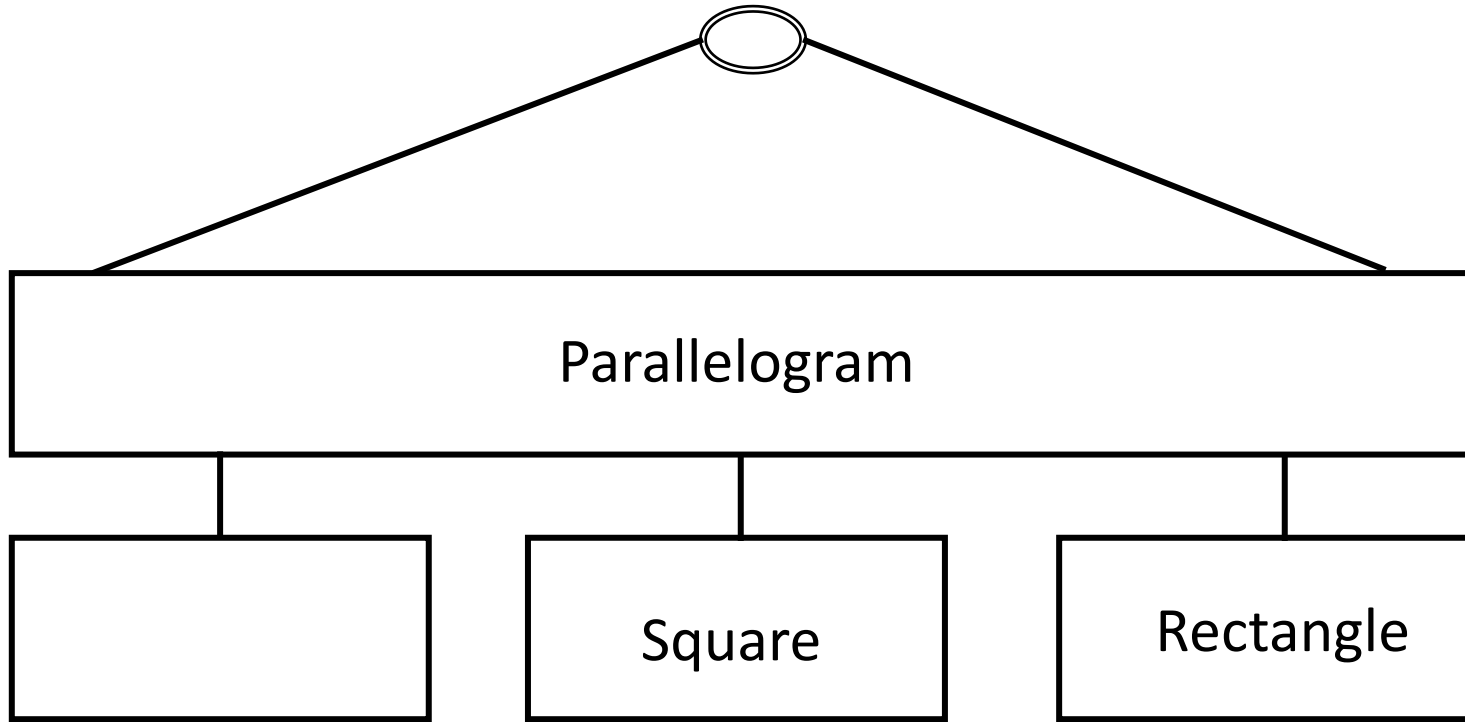
22. In the diagram shown, each circle represents a group of polygons. If a polygon belongs in a circle, it also belongs in any larger circle.



Which kind of polygons belong in the shaded circle?

- A. Squares
- B. Rectangles
- C. Trapezoids
- D. All of these

23. Nathan built the hanging mobile shown in the picture to show some relationships among shapes.



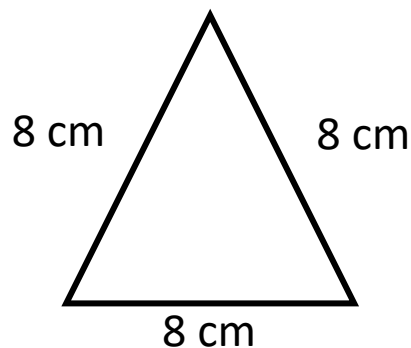
Which shape goes in the empty box to complete Nathan's mobile?

- A. Trapezoid
- B. Quadrilateral
- C. Rhombus
- D. Triangle

24. This graphic organizer is being used to classify triangles based on their angle measures or side lengths.

| Angle Measure Classification |       |        | Side Length Classification |             |         |
|------------------------------|-------|--------|----------------------------|-------------|---------|
| Acute                        | Right | Obtuse | Isosceles                  | Equilateral | Scalene |

Which list shows all the ways this triangle could be classified?



- A. Acute only
- B. Equilateral only
- C. Acute and isosceles only
- D. Acute, isosceles, and equilateral



# Unit: 5<sup>th</sup> – Geometry

## Lesson: Classify 2D Figures

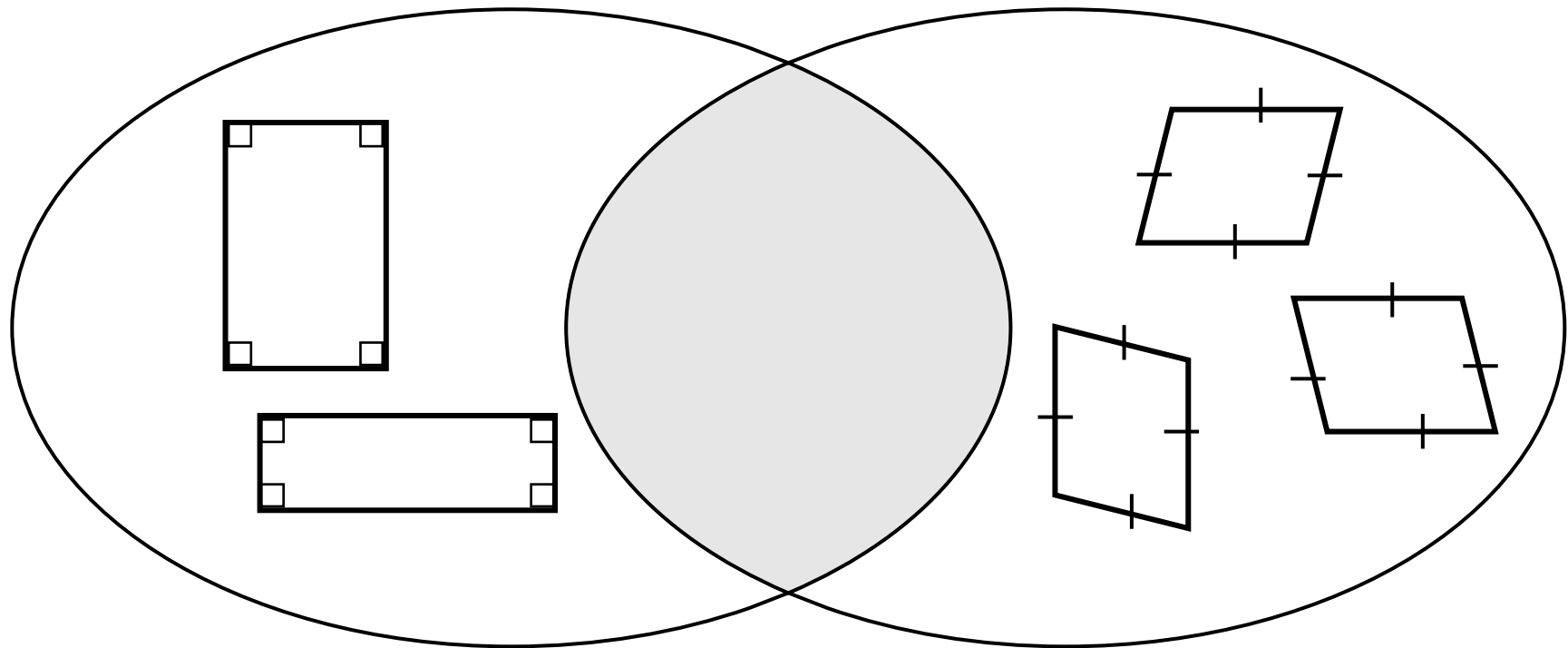
### Problem Set 5

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|                                  |                    |                    |                    |                    |                    |
|----------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| <b>1</b><br><br>C                | <b>2</b><br><br>D  | <b>3</b><br><br>A  | <b>4</b><br><br>B  | <b>5</b><br><br>C  | <b>6</b><br><br>B  |
| <b>7</b><br><br>A                | <b>8</b><br><br>B  | <b>9</b><br><br>D  | <b>10</b><br><br>C | <b>11</b><br><br>A | <b>12</b><br><br>B |
| <b>13</b><br><br>C               | <b>14</b><br><br>B | <b>15</b><br><br>C | <b>16</b><br><br>C | <b>17</b><br><br>B | <b>18</b><br><br>D |
| <b>19</b><br><br>A               | <b>20</b><br><br>C | <b>21</b><br><br>A | <b>22</b><br><br>A | <b>23</b><br><br>C | <b>24</b><br><br>D |
| <b>25</b><br><br>C               | <b>26</b><br><br>B | <b>27</b><br><br>A | <b>28</b><br><br>B | <b>29</b><br><br>A | <b>30</b><br><br>D |
| 5.5.A – Classify 2D Figures - PS |                    |                    |                    |                    |                    |



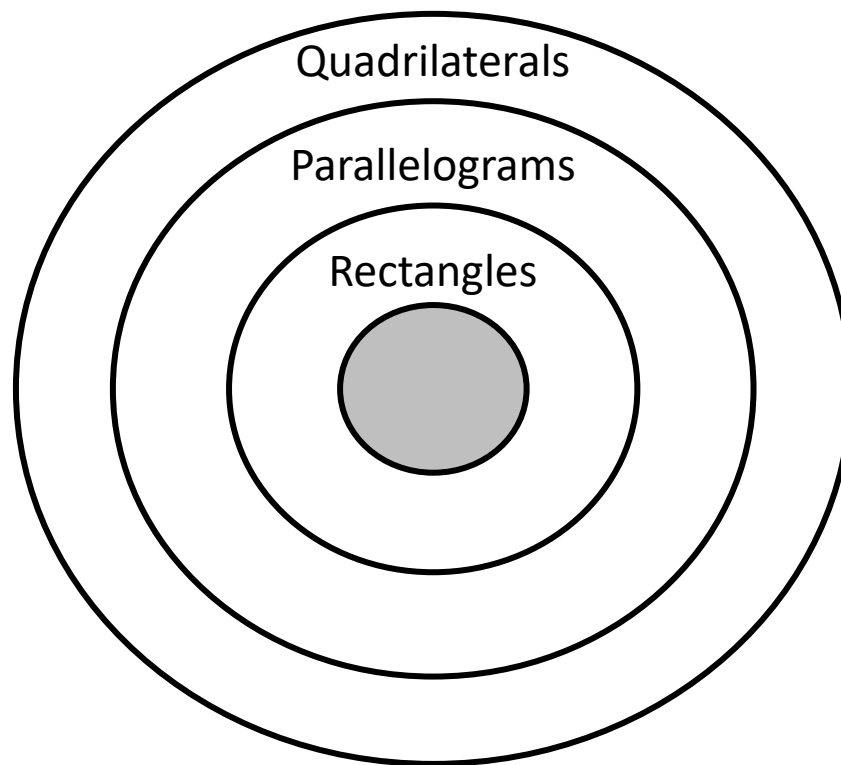
25. This Venn diagram is being used to classify two types of quadrilaterals.



Which type of figure will always belong in the shaded section of this Venn diagram?

- A. Rectangle
- B. Rhombus
- C. Square
- D. Trapezoid


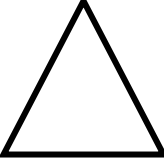
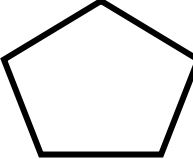
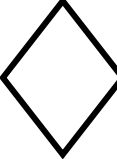


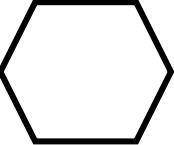

26. In the diagram shown, each circle represents a group of polygons. If a polygon belongs in a circle, it also belongs in any larger circle.



Which kind of polygons belong in the shaded circle?

- A. Trapezoids
- B. Squares
- C. Pentagons
- D. Rhombuses

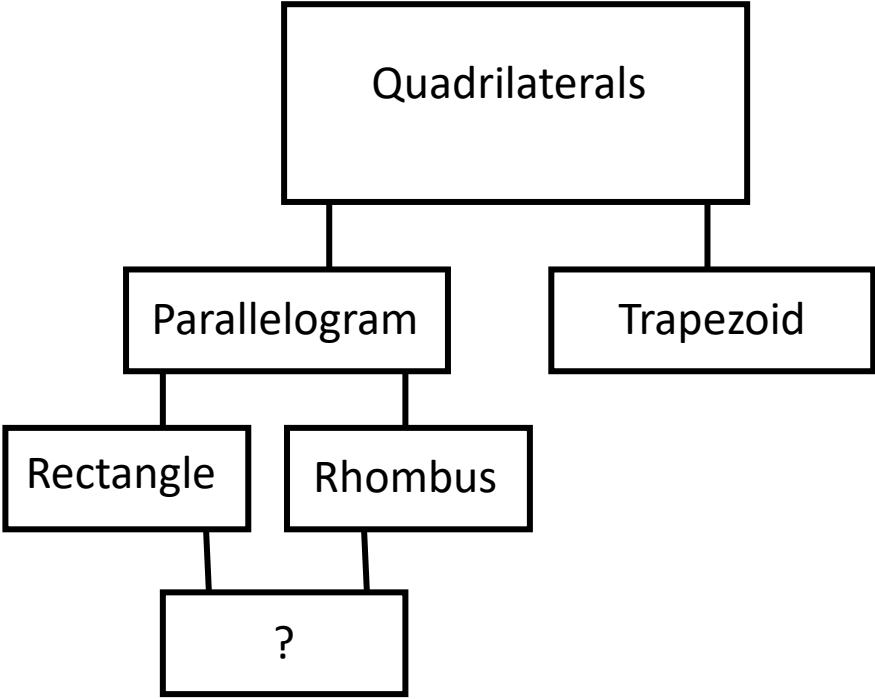
27. Rachel classified shapes based on the types of angles they had. The table shows her classifications.

| Right Angles Only                                                                            | Acute Angles Only                                                                            | Obtuse Angles Only                                                                             | Both Acute and Obtuse Angles                                                                   |
|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| <br>Shape 1 | <br>Shape 3 | <br>Shape 5 | <br>Shape 7 |
| <br>Shape 2 | <br>Shape 4 | <br>Shape 6 | <br>Shape 8 |

Which shape was NOT classified correctly?

- A. Shape 4
- B. Shape 5
- C. Shape 7
- D. Shape 8

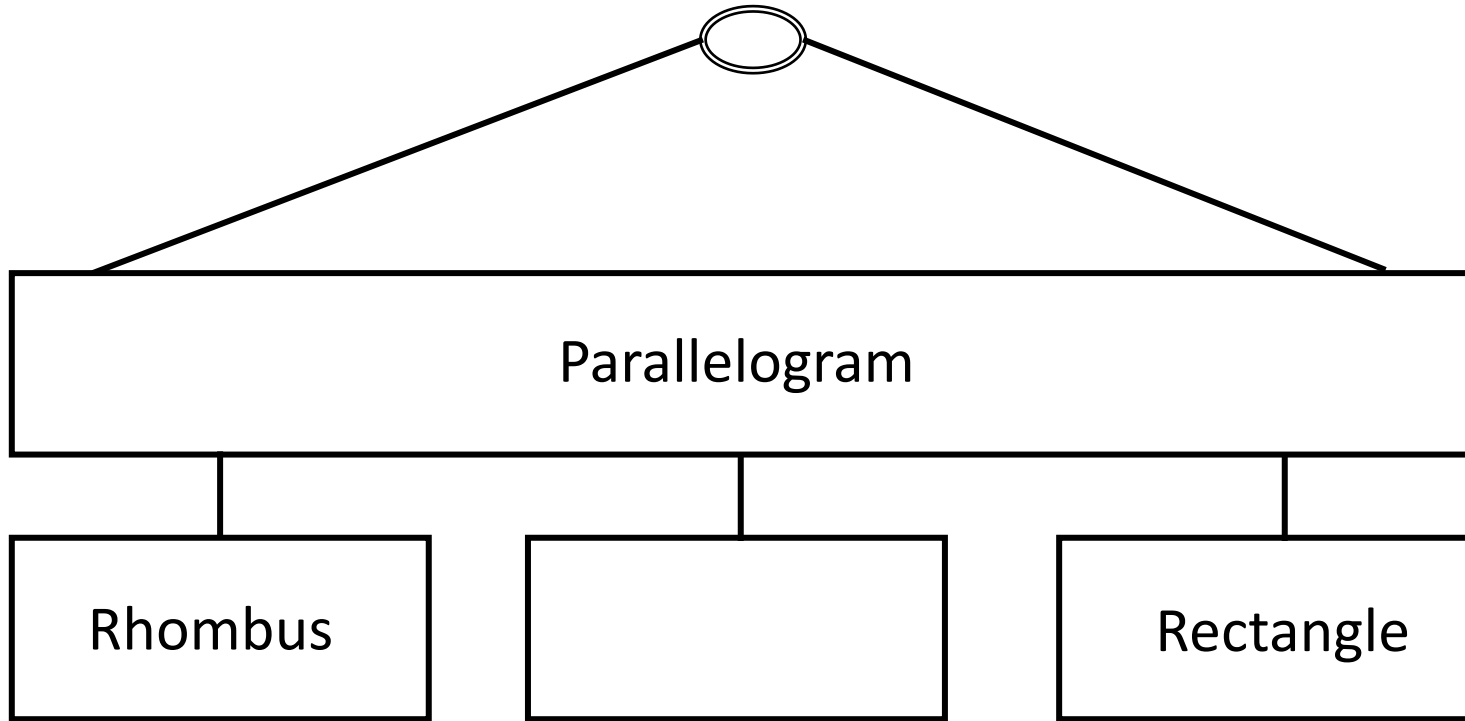
28. Alice is making a mobile that lists quadrilaterals.



What is the name of the subset of quadrilaterals missing from Alice's mobile?

- A. Hexagon
- B. Square
- C. Polygon
- D. Triangle

29. Natalie built the hanging mobile shown in the picture to show some relationships among shapes.






Which shape goes in the empty box to complete Natalie's mobile?




- A. Square
- B. Quadrilateral
- C. Trapezoid
- D. Triangle

30. In which table are the check marks placed in all the correct boxes?


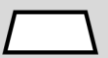

A.

|                                                                                   | Quadrilateral | Parallelogram | Polygon |
|-----------------------------------------------------------------------------------|---------------|---------------|---------|
|  |               |               | ✓       |
|  | ✓             | ✓             | ✓       |
|  | ✓             | ✓             | ✓       |


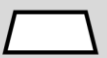

B.

|                                                                                     | Quadrilateral | Parallelogram | Polygon |
|-------------------------------------------------------------------------------------|---------------|---------------|---------|
|  |               |               | ✓       |
|  | ✓             |               |         |
|  | ✓             | ✓             |         |

C.

|                                                                                     | Quadrilateral | Parallelogram | Polygon |
|-------------------------------------------------------------------------------------|---------------|---------------|---------|
|   |               |               | ✓       |
|  |               | ✓             | ✓       |
|  | ✓             | ✓             | ✓       |

D.

|                                                                                       | Quadrilateral | Parallelogram | Polygon |
|---------------------------------------------------------------------------------------|---------------|---------------|---------|
|   |               |               | ✓       |
|  | ✓             |               | ✓       |
|  | ✓             | ✓             | ✓       |