## Lesson 3: Specific Side Lengths

* Let’s find and draw shapes with specific side lengths.

### Warm-up: Which One Doesn’t Belong: Different Shapes

Which one doesn’t belong?

A

B

C

D

### 3.1: Measure Twice, Draw Once

1. Diego drew a shape that has fewer than 5 sides. Two sides are 3 centimeters long. Circle shapes that could be Diego’s shape.
* 
* 
* 
* 
1. Tyler drew a shape that has 4 sides. Each side is 2 inches long.
	1. Circle shapes that could be Tyler’s shape.
	* 
	* 
	* 
	* 
	1. Draw another shape that could be Tyler’s shape.
2. Priya drew a shape that has more sides than Tyler’s shape. Only one side of her shape is 2 inches long. Draw two shapes that could be Priya’s shape.

### 3.2: Build a Shape

1. Choose your own attributes. Circle an attribute from each row.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| * sides
 | * 3
 | * 4
 | * 5
 | * 6
 |
| * corners
 | * 3
 | * 4
 | * 5
 | * 6
 |
| * side length
 | * 1 side is 2 in.
 | * 2 sides are 2 in.
 | * 2 sides are 3 in.
 | * 4 sides are 2 in.
 |
| * squarecorners
 | * 0
 | * 1
 | * 2
 | * all square corners
 |

* Draw and name a shape with the attributes you chose. If you cannot draw the shape, explain why.
* Shape:
* Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. Choose your own attributes. Circle an attribute from each row.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| * sides
 | * 3
 | * 4
 | * 5
 | * 6
 |
| * corners
 | * 3
 | * 4
 | * 5
 | * 6
 |
| * side length
 | * 1 side is 2 in.
 | * 2 sides are 2 in.
 | * 2 sides are 3 in.
 | * 4 sides are 2 in.
 |
| * squarecorners
 | * 0
 | * 1
 | * 2
 | * all square corners
 |

* Draw and name a shape with the attributes you chose. If you cannot draw the shape, explain why.
* Shape:
* Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. Choose your own attributes. Circle an attribute from each row.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| * sides
 | * 3
 | * 4
 | * 5
 | * 6
 |
| * corners
 | * 3
 | * 4
 | * 5
 | * 6
 |
| * side length
 | * 1 side is 2 in.
 | * 2 sides are 2 in.
 | * 2 sides are 3 in.
 | * 4 sides are 2 in.
 |
| * squarecorners
 | * 0
 | * 1
 | * 2
 | * all square corners
 |

* Draw and name a shape with the attributes you chose. If you cannot draw the shape, explain why.
* Shape:
* Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. Cover your attribute table and trade papers with your partner. Guess which attributes they used to draw their shape.
2. **If you have time**: Are there any attributes that are impossible to put together to make a shape? Show or explain.



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