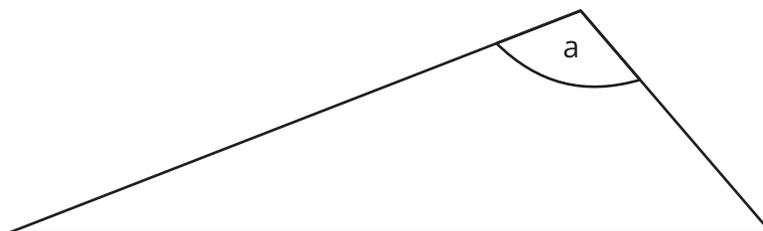


Lesson 8: Sort Triangles

- Let's sort triangles.

Warm-up: Estimation Exploration: Angle Measure

What is the measure of the angle?



Record an estimate that is:

| too low | about right | too high |
|---------|-------------|----------|
| | | |

8.1: The Right Fit

1. Find a triangle card that fits in each space on the grid.
2. If you don't think it is possible to find a triangle that fits certain criteria, explain why not.

| | all three side lengths are different | exactly two of the side lengths are the same | all three side lengths are the same |
|--|--------------------------------------|--|-------------------------------------|
| has a 90 degree angle | | | |
| has an angle that is greater than 90 degrees | | | |
| all three angles are less than 90 degrees | | | |

Explanations:

8.2: All, Some, None

- Sort the triangle cards from the previous activity in a way that makes sense to you. Describe how you sorted the cards.

- Now sort out the triangles with a 90 degree angle. For these triangles, write statements about each category.

- All of the triangles with a 90 degree angle...

- Some of the triangles with a 90 degree angle...

- None of the triangles with a 90 degree angle...

Section Summary

Section Summary

In this section we sorted and analyzed different kinds of quadrilaterals and triangles. We described their properties. For example:

- A rectangle is a quadrilateral with 4 right angles.
- A rhombus is a quadrilateral with 4 equal sides.
- A square is a quadrilateral with 4 right angles and 4 equal sides.

We also described how the shapes are related to each other. For example, we can see that a square is always a rhombus because it has the properties of a rhombus. A square is also always a rectangle because it has the properties of a rectangle. On the other hand, a rectangle does not need to be a square because its side lengths don't have to all be the same. And a rhombus does not need to be a square because its angles do not have to be right angles.