

Circular Reasoning Illustration #1

Look at the definitions on Vocabulary Card 3. Create each kind of angle in Circular Reasoning and label each one. Which circle parts can you use to show the difference between an acute angle and a reflex angle?

Circular Reasoning Illustration #2

Make a sector with a central angle that is a straight angle. What fraction of a circle have you made?

Circular Reasoning Illustration #3

Make a sector with a central angle that is a right angle. What fraction of a circle have you made?

Circular Reasoning Illustration #4

Make a fraction circle with each piece a straight angle. How many pieces does it have?

Circular Reasoning Illustration #5

Make a fraction circle with each piece a right angle. How many pieces does it have?

Circular Reasoning Illustration #6

Look at Vocabulary Card 4. Show examples of each item with Circular Reasoning and label each one. Are the angles in a fraction circle congruent? Why or why not?

Circular Reasoning Illustration #7

Make a segment that looks just like a sector. Explain why the two look the same.

Circular Reasoning Illustration #8

Make a segment and use the slider to change its central angle. When is the chord the longest?

Circular Reasoning Illustration #9

Look at Vocabulary Card 5. Show an example of each item and label each one.

Circular Reasoning Illustration #10

In general, we have found that

(1) Direction of terminal radius = Direction of initial radius + central angle

How can you use this information to make two adjacent angles?

We also know that

(2) A straight angle is 180 degrees

Try to use (1) and (2) to make a pair of vertical angles. What else did you learn about vertical angles?

Circular Reasoning Illustration #11

Make a pair of adjacent complementary angles (*Extra challenge: don't let any of the radii have a direction of zero degrees*).

Circular Reasoning Illustration #12

Make a pair of adjacent supplementary angles (*Extra challenge: don't let any of the radii have a direction of zero degrees*).