## Lesson 15: Reasoning About Angles (Part 2)

* Let’s figure out missing angle measurements.

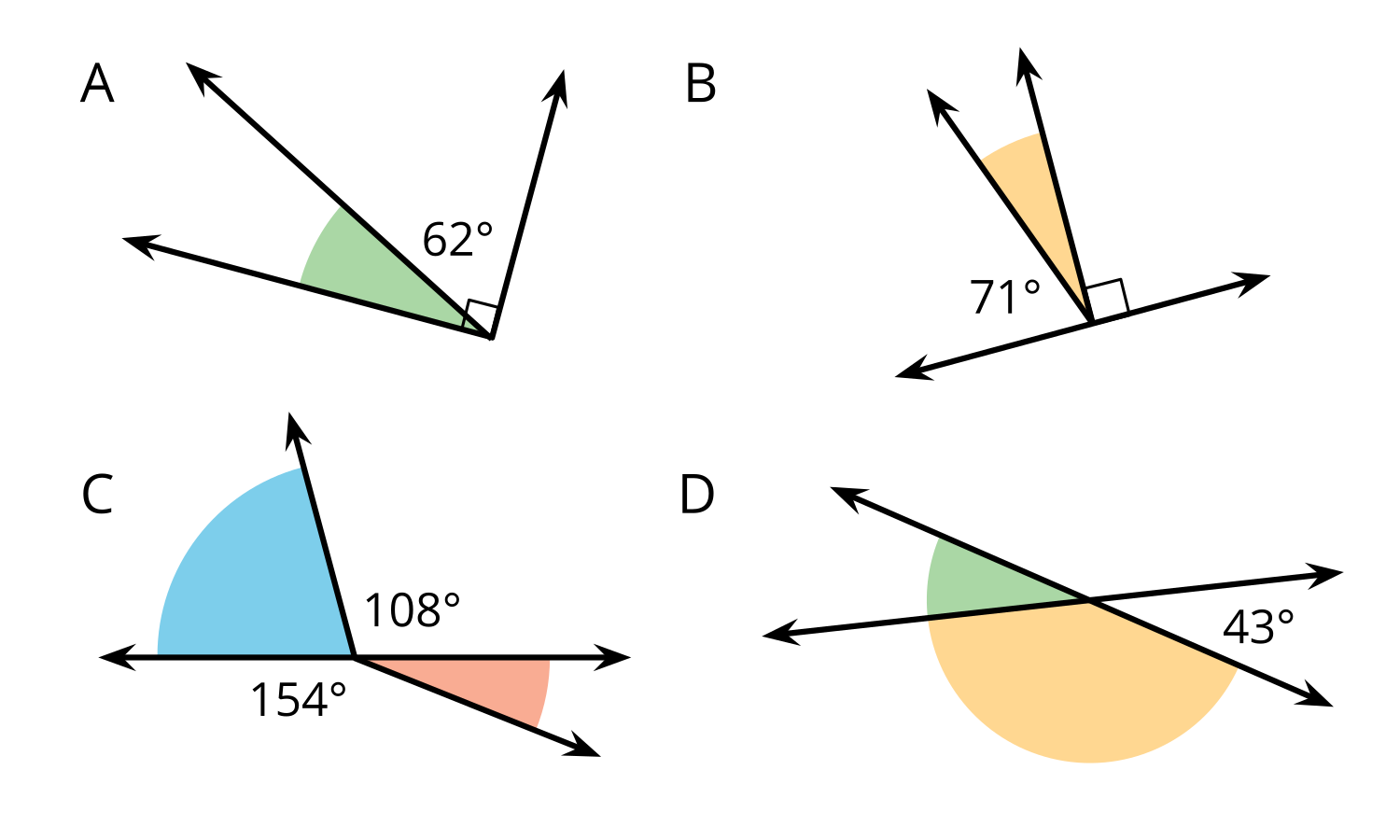
### Warm-up: How Many Do You See: Obtuse Angles

How many angles do you see in the folded paper heart?



### 15.1: Shaded and Unshaded Angles

Find the measurement of each shaded angle. Show how you know.



### 15.2: Info Gap: A Whole Bunch of Angles

Your teacher will give you either a problem card or a data card. Do not show or read your card to your partner.



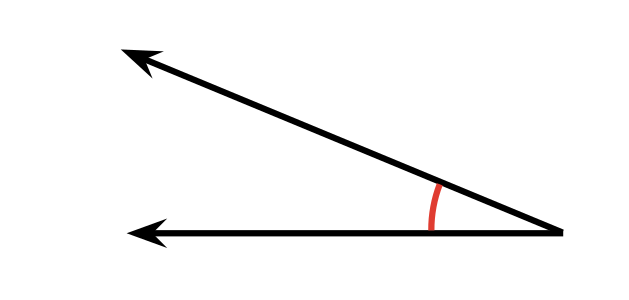
Pause here so your teacher can review your work. Ask your teacher for a new set of cards and repeat the activity, trading roles with your partner.

### Section Summary

Section Summary

Earlier in the unit, we learned that a right angle measures exactly . In this section, we learned other ways to name angles based on their measurements.

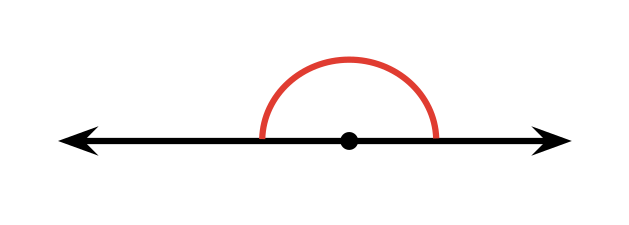
* **Acute angles** are less than 90º.



* **Obtuse angles** are greater than 90º but less than 180º.

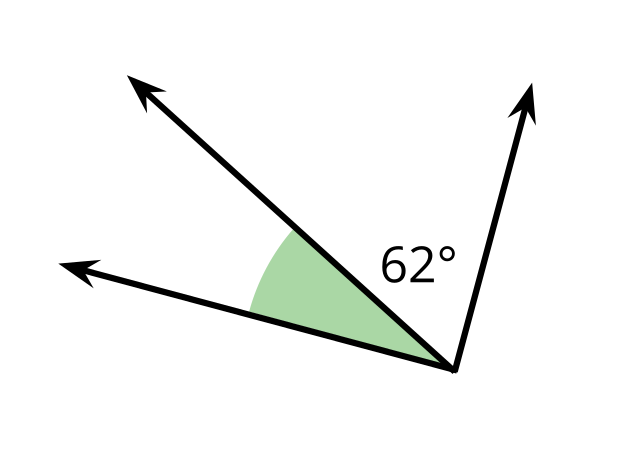


* **Straight angles** are exactly 180º.



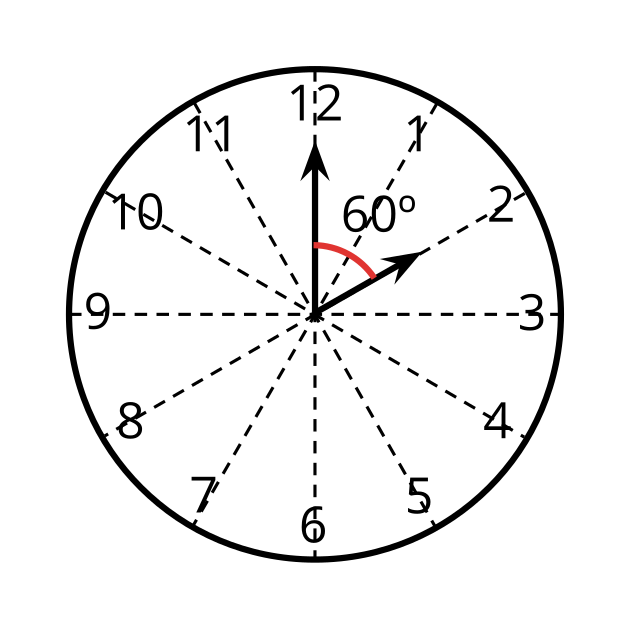
We also solved problems about angles. For example, if two angles make a right angle or a straight angle, we can use the size of one angle to find the other.

The shaded angle here must be  because it makes a right angle when combined with the  angle.



Another example: Knowing that a full turn measures , we reasoned that the long hand of a clock makes:

* a angle every hour
* a angle every one-half hour
* a angle every 15 minutes
* a angle every 10 minutes





© CC BY 2021 Illustrative Mathematics®