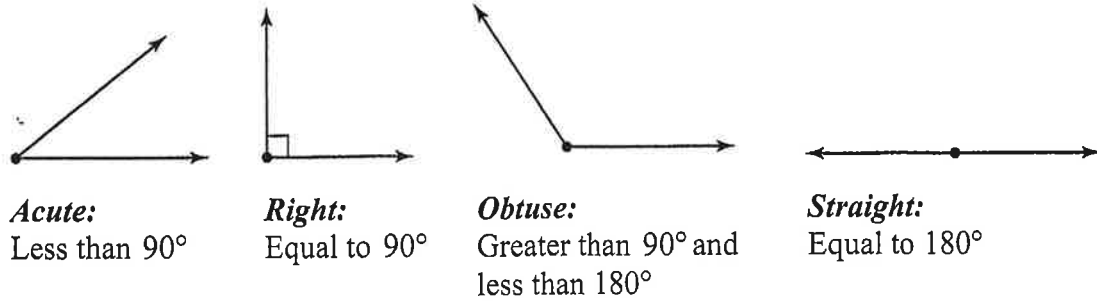


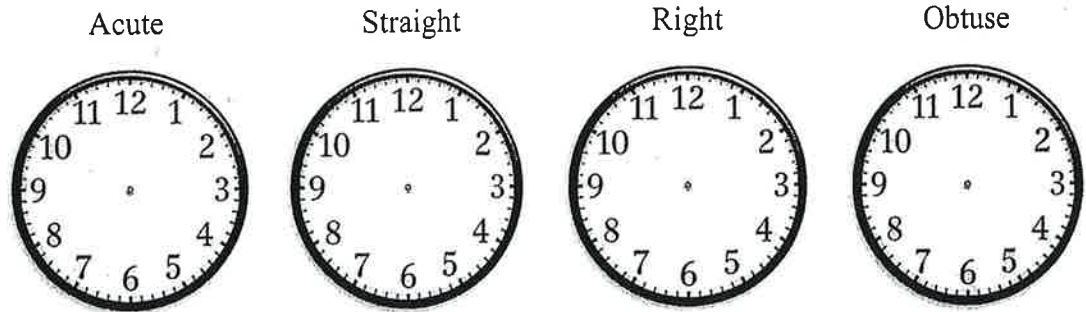
What Can You Conclude About the Angles Formed by Two Intersecting Lines? (Topic #1)

Classification of Angles



ACTIVITY: Drawing Angles

a. Draw the hands of the clock to represent the given type of angle.



b. What is the measure of the angle formed by the hands of the clock at the given time?

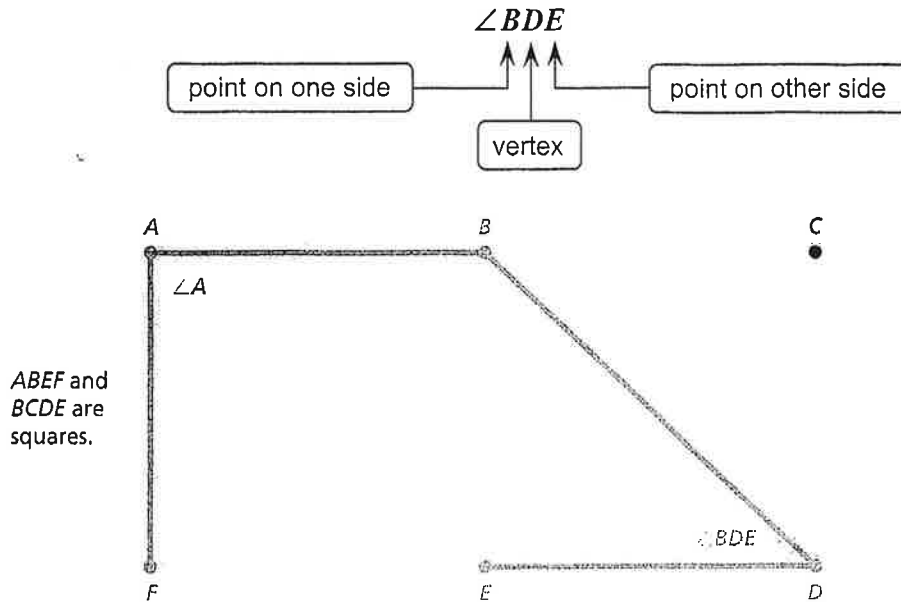
9:00

6:00

12:00

ACTIVITY: Naming Angles

Some angles, such as $\angle A$, can be named by a single letter. When this does not clearly identify an angle, you should use three letters, as shown.



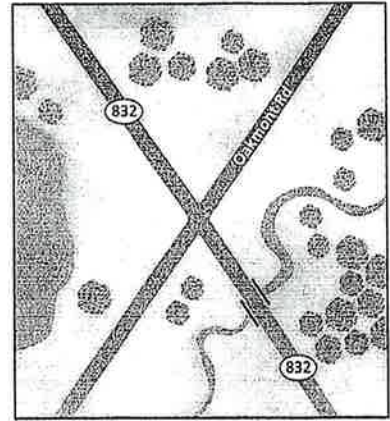
a. Name all of the right angles, acute angles, and obtuse angles.

b. Which pairs of angles do you think are *adjacent*? Explain.

ACTIVITY: Measuring Angles

- a. How many angles are formed by the intersecting roads? Number the angles.

- b. **CHOOSE TOOLS** Measure each angle formed by the intersecting roads. What do you notice?



What Is Your Answer?

4. **IN YOUR OWN WORDS** What can you conclude about the angles formed by two intersecting lines?

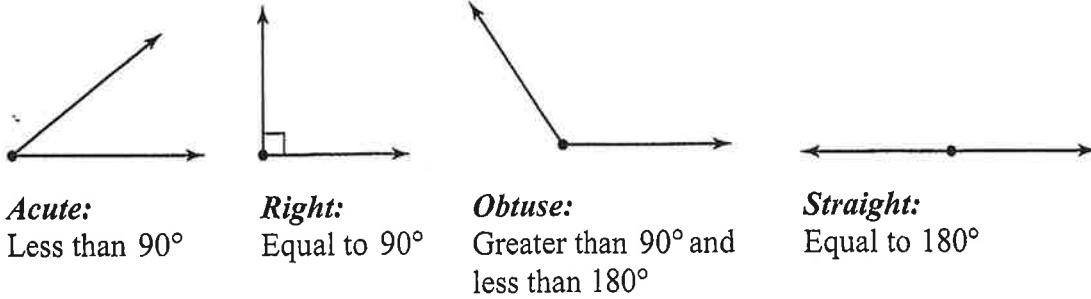
5. Draw two acute angles that are adjacent.

KEY

What Can You Conclude About the Angles Formed by Two Intersecting Lines?

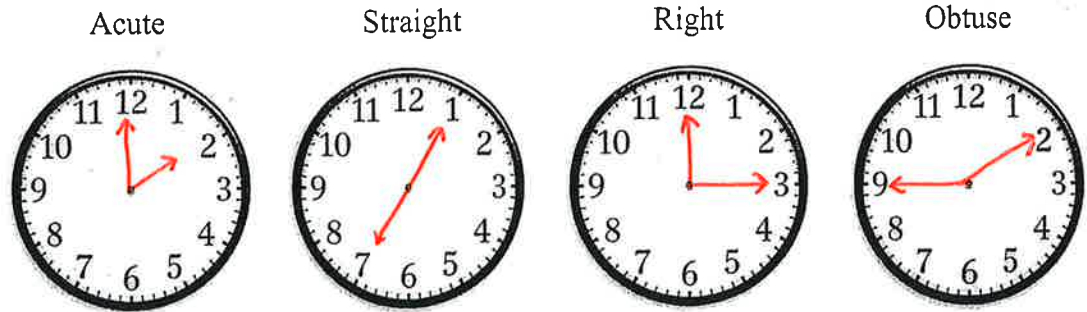
(Topic #1)

Classification of Angles



ACTIVITY: Drawing Angles

a. Draw the hands of the clock to represent the given type of angle.



b. What is the measure of the angle formed by the hands of the clock at the given time?

9:00

90°

6:00

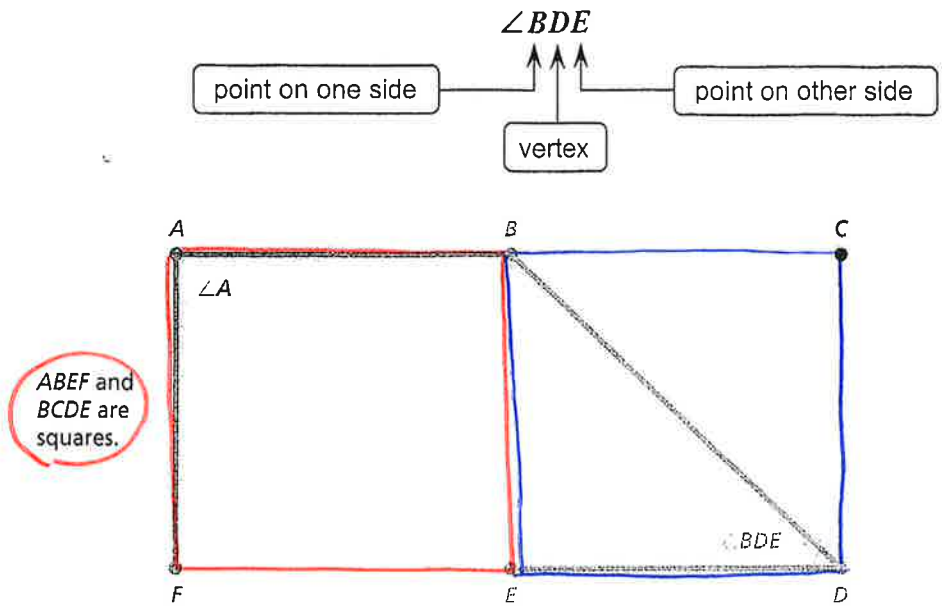
180°

12:00

0°

ACTIVITY: Naming Angles

Some angles, such as $\angle A$, can be named by a single letter. When this does not clearly identify an angle, you should use three letters, as shown.



a. Name all of the right angles, acute angles, and obtuse angles.

<p><u>Right</u> :</p> <p>$\angle FAB$</p> <p>$\angle ABE$</p> <p>$\angle BEF$</p> <p>$\angle EFA$</p> <p>$\angle BED$</p> <p>$\angle BCD$</p>	<p>$\angle CDE$</p> <p>$\angle CBE$</p>	<p><u>Acute</u> :</p> <p>$\angle CBD$</p> <p>$\angle EBD$</p> <p>$\angle BDE$</p> <p>$\angle BDC$</p>	<p><u>obtuse</u> :</p> <p>$\angle ABD$</p>
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b. Which pairs of angles do you think are adjacent? Explain.

$\angle ABE$ and $\angle CBE$

$\angle FEB$ and $\angle DEB$

$\angle EBD$ and $\angle CBD$

$\angle EDB$ and $\angle CDB$

$\angle ABD$ and $\angle CBD$

They share a common side and a common vertex.

ACTIVITY: Measuring Angles

- a. How many angles are formed by the intersecting roads? Number the angles.

4

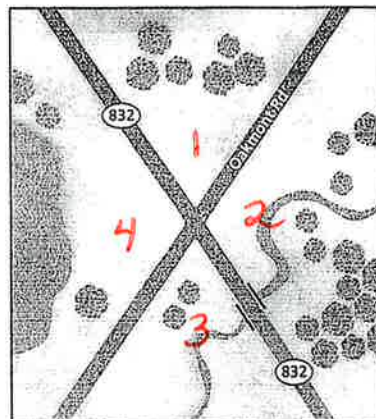
- b. **CHOOSE TOOLS** Measure each angle formed by the intersecting roads. What do you notice?

$$\angle 1 = 70^\circ$$

$$\angle 2 = 110^\circ$$

$$\angle 3 = 70^\circ$$

$$\angle 4 = 110^\circ$$



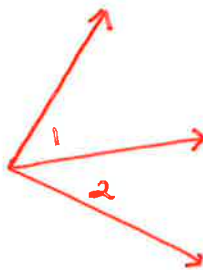
Two pairs of angles
have the same measure.

What Is Your Answer?

4. **IN YOUR OWN WORDS** What can you conclude about the angles formed by two intersecting lines?

- Four angles are formed w/ four pairs of adjacent angles
- Opposite angles are congruent (same measure)
- Sum of all 4 angles equal 360° .

5. Draw two acute angles that are adjacent.



(Answers will vary)