

Name _____ Date _____

Using Angle Measures (pages 358–361)

You can use a protractor and a **straightedge**—a ruler or any object with a straight side—to draw an angle with a measure of a certain number of degrees. You can also estimate the measure of an angle.

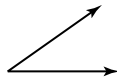
Estimating the Measure of an Angle	Estimate the measure of an angle by comparing it to a right angle (90°), half of a right angle (45°), one third of a right angle (30°), or two thirds of a right angle (60°). You can also compare an angle to a straight angle (180°).
---	--

EXAMPLES

A Use two pencils to show an angle of about 35° .

Think: How does 35° compare to 90° ?

Hold the pencils to show an angle a little more than one third of a right angle and a little less than half of a right angle.



B Is this angle greater than, less than, or about equal to 125° ?

The angle shown is just a little less than 180° so it is greater than 125° .



Try These Together

1. Use a straightedge to draw an angle that you estimate to be about 22° .

HINT: What is half of 45° ?

2. Use a straightedge to draw an angle that you estimate to be about 135° .

HINT: Notice that 135° is 90° plus 45° .

PRACTICE

Use a protractor and a straightedge to draw angles having the following measurements.

3. 80°

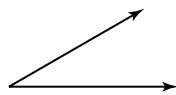
4. 145°

5. 45°

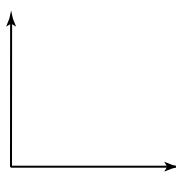
6. 110°

Estimate the measure of each angle.

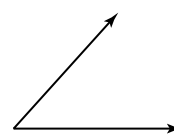
7.



8.



9.

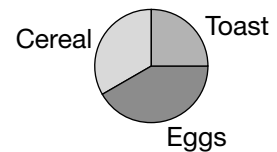


10. Standardized Test Practice The circle graph shows what people prefer to eat for breakfast. Which of the following shows the order of breakfasts from most-preferred to least-preferred?

- A** eggs, toast, cereal
- C** toast, eggs, cereal

- B** cereal, eggs, toast
- D** eggs, cereal, toast

Breakfast Preferences



Answers: 1–2. Use a protractor to see how close your estimates are. 3–6. See Answer Key. 7–9. Sample answers are given. 7. about 30° 8. about 90° 9. about 45° 10. D