

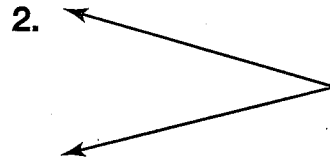
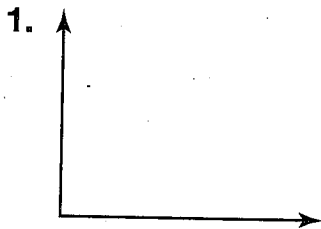
Name \_\_\_\_\_

Practice

**8-2**

# Measuring and Classifying Angles

Classify each angle as *acute*, *right*, *obtuse*, or *straight*. Then measure each angle. (Hint: Draw longer sides if necessary.)



Draw an angle with each measure.

3.  $120^\circ$

4.  $180^\circ$

5. Draw an acute angle. Label it with the letters A, B, and C. What is the measure of the angle?

\_\_\_\_\_

6. Which kind of angle is shown in the figure below?

A Acute

C Obtuse

B Right

D Straight



7. **Explain It** Explain how to use a protractor to measure an angle.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_

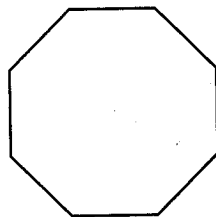
Practice

**8-3**

# Polygons

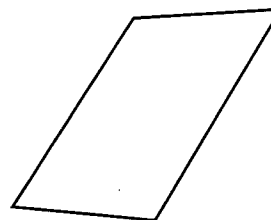
Name each polygon. Then tell if it appears to be a regular polygon.

1.



\_\_\_\_\_  
\_\_\_\_\_

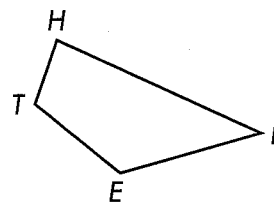
2.



\_\_\_\_\_  
\_\_\_\_\_

3. Name the polygon. Name the vertices.

\_\_\_\_\_  
\_\_\_\_\_



4. Which polygon has eight sides?

**A** quadrilateral

**B** pentagon

**C** hexagon

**D** octagon

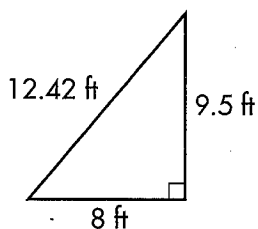
5. **Explain It** Draw two regular polygons and two that are irregular. Use geometric terms to describe one characteristic of each type.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Triangles

Classify each triangle by its sides and then by its angles.

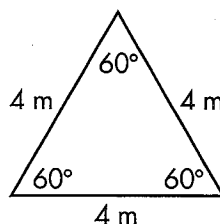
1.



\_\_\_\_\_

\_\_\_\_\_

2.



\_\_\_\_\_

\_\_\_\_\_

The measures of two angles of a triangle are given. Find the measure of the third angle.

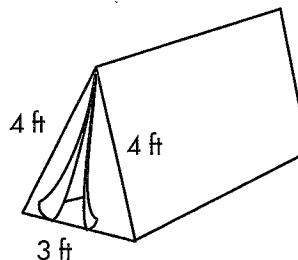
3.  $47^\circ, 62^\circ, \underline{\hspace{2cm}}$

4.  $29^\circ, 90^\circ, \underline{\hspace{2cm}}$

5.  $75^\circ, 75^\circ, \underline{\hspace{2cm}}$

6.  $54^\circ, 36^\circ, \underline{\hspace{2cm}}$

7. Judy bought a new tent for a camping trip. Look at the side of the tent with the opening to classify the triangle by its sides and its angles.



\_\_\_\_\_

8. **Reasonableness** Which describes a scalene triangle?

**A** 4 equal sides   **B** 3 equal sides   **C** 2 equal sides   **D** 0 equal sides

9. **Explain It** The lengths of two sides of a triangle are 15 in. each. The third side measures 10 in. What type of triangle is this? Explain your answer using geometric terms.

\_\_\_\_\_

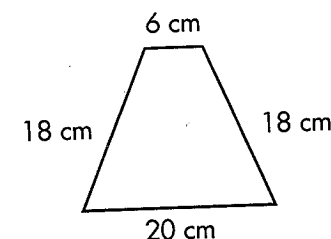
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Name \_\_\_\_\_

# Quadrilaterals

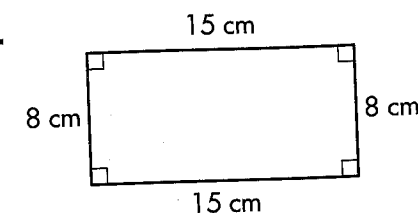
Classify each quadrilateral. Be as specific as possible.

1.



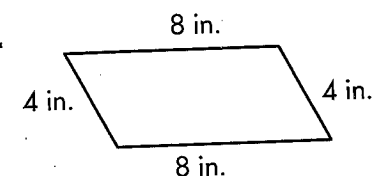
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2.



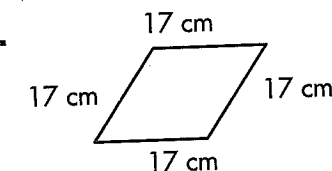
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3.



\_\_\_\_\_

4.



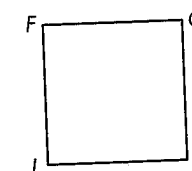
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For 5 and 6, the measures of three angles of a quadrilateral are given. Find the measure of the fourth angle.

5.  $90^\circ$ ,  $145^\circ$ ,  $78^\circ$ , \_\_\_\_\_6.  $110^\circ$ ,  $54^\circ$ ,  $100^\circ$ , \_\_\_\_\_

7. Name the vertices of the square to the right.

\_\_\_\_\_



8. Three of the angles of a quadrilateral measure  $80^\circ$ ,  $100^\circ$ , and  $55^\circ$ . Which is the measure of the fourth angle?

A  $115^\circ$ B  $120^\circ$ C  $125^\circ$ D  $130^\circ$