Name _____   Date _____
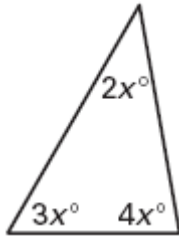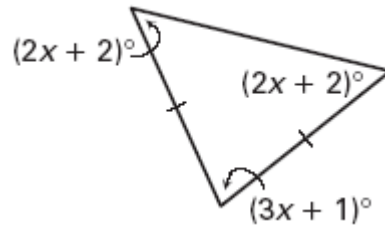
Practice C
For use with pages 216–224

Classify the triangle by its sides. Then find the value of *x* and classify the triangle by its angles.
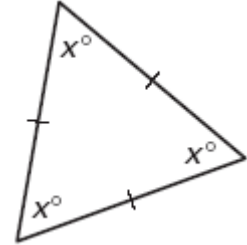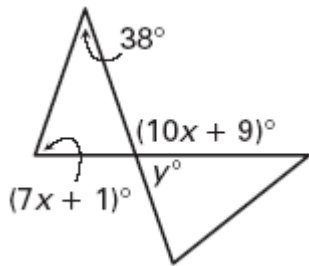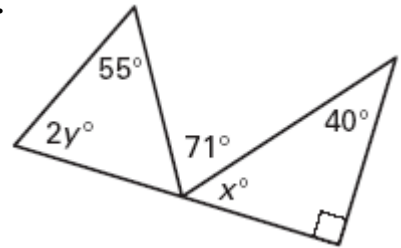
1.

$2x°$

$3x°$ $4x°$

2.

$(2x + 2)°$

$(2x + 2)°$

$(3x + 1)°$

3.

$x°$

$x°$

$x°$

Find the value of *x* and *y*.

4.

$38°$

$(10x + 9)°$

$y°$

$(7x + 1)°$

5.

$55°$

$2y°$

$71°$

$40°$

$x°$

6.

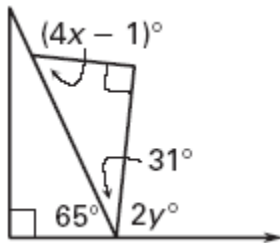$(4x − 1)°$
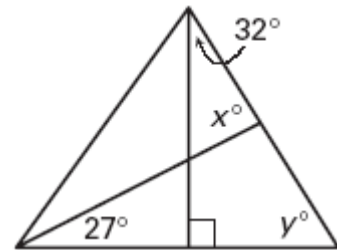
$31°$
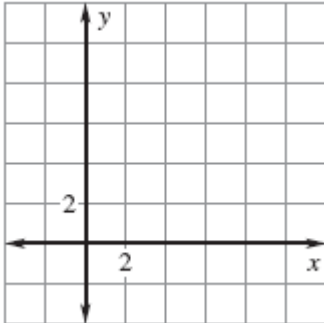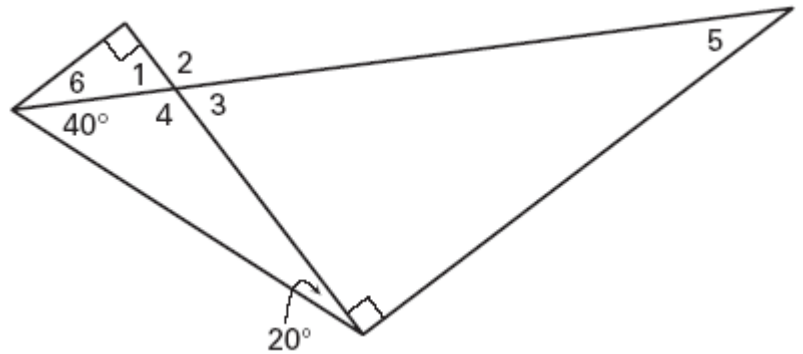
$65°$ $2y°$

7.

$32°$

$x°$

$27°$ $y°$

A triangle has the given vertices. Graph the triangle and classify it by its sides. Then determine if it is a right triangle.

8. $A(2, 2), B(6, 2), C(4, 8)$

Find the measure of the numbered angle

9. $m\angle 1$
10. $m\angle 2$
11. $m\angle 3$
12. $m\angle 4$
13. $m\angle 5$
14. $m\angle 6$

15. **Angle Measures** The measure of one interior angle of a triangle is 32°. The other interior angles are congruent. Find their measure.

15. In $\triangle ABC$, $m\angle A = 42°$. The measure of $\angle B$ is five times the measure of $\angle C$. Find $m\angle B$ and $m\angle C$.

16. **Coat Hanger** A 30 inch piece of metal wire is used to make the triangular portion of a coat hanger. One side of this isosceles triangle is 8 inches. Find two different sets of measurements to make the coat hanger.