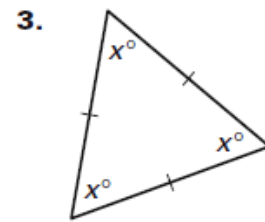
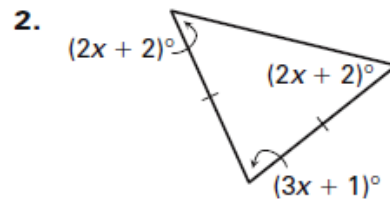
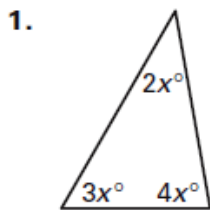
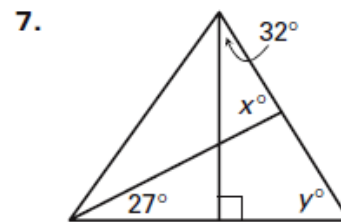
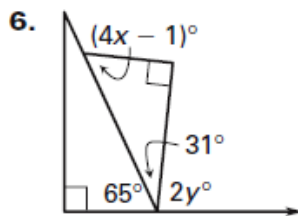
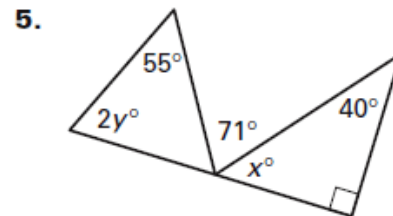
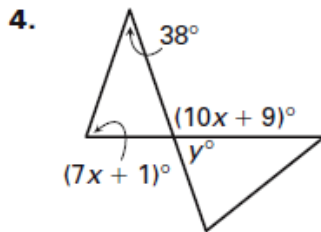


Classify the triangle by its sides. Then find the value of x and classify the triangle by its angles.



Find the value of x and y .



Find the measure of the numbered angle.

8. $m\angle 1$

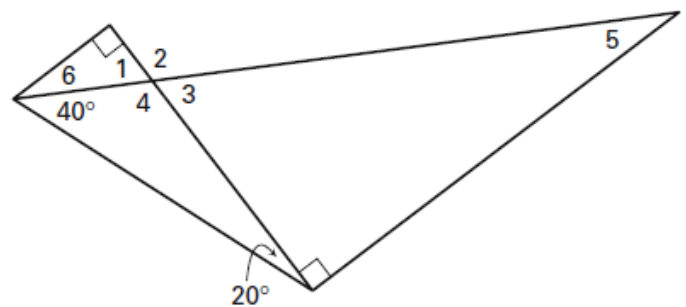
9. $m\angle 2$

10. $m\angle 3$

11. $m\angle 4$

12. $m\angle 5$

13. $m\angle 6$



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

15. In $\triangle ABC$, $m\angle A = 42^\circ$. 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.

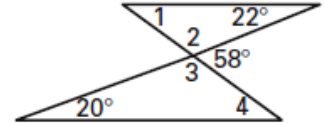
Find the measure of the numbered angle.

17. $\angle 1$

18. $\angle 2$

19. $\angle 3$

20. $\angle 4$

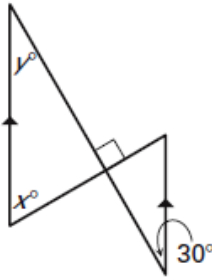


21. In $\triangle ABC$, $m\angle A = m\angle B + 30^\circ$ and $m\angle C = m\angle B + 60^\circ$. Find the measure of each angle.

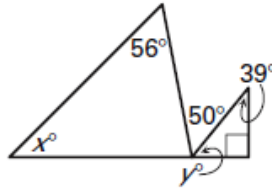
22. In $\triangle ABC$, $m\angle A = 2(m\angle B)$ and $m\angle C = 3(m\angle B)$. Find the measure of each angle.

Find the values of x and y .

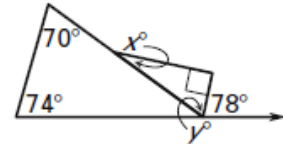
23.



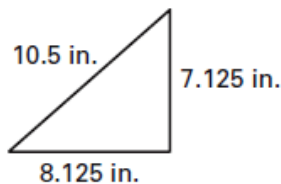
24.



25.



26. **Metal Brace** The diagram shows the dimensions of a metal brace used for strengthening a vertical and horizontal wooden junction. Classify the triangle formed by its sides. Then copy the triangle, measure the angles, and classify the triangle by its angles.



27. In $\triangle ABC$, $m\angle A$ is twice $m\angle B$, and $m\angle C$ is 8 more than $m\angle B$. What is the measure of each angle?

28. The measures of the angles of a triangle are $(2\sqrt{2x}^\circ)$, $(5\sqrt{2x}^\circ)$, and $(2\sqrt{2x}^\circ)$. Find the measure of each angle and classify the triangle by its angles.

Answer Key - Practice Level C

1. scalene; 20; acute
2. isosceles; 25; acute
3. equilateral; 60; equiangular
4. $x = 10$; $y = 71$
5. $x = 50$; $y = 33$
6. $x = 15$; $y = 42$
7. $x = 85$; $y = 58$
8. 60°
9. 120°
10. 60°
11. 120°
12. 30°
13. 30°
14. 74°
15. $m\angle B = 115^\circ$; $m\angle C = 23^\circ$
16. 8 in. by 11 in. by 11 in.; 8 in. by 8 in. by 14 in.
17. 36°
18. 122°
19. 122°
20. 38°
21. $m\angle A = 60^\circ$, $m\angle B = 30^\circ$, $m\angle C = 90^\circ$
22. $m\angle A = 60^\circ$, $m\angle B = 30^\circ$, $m\angle C = 90^\circ$
23. 60, 30
24. 45, 51
25. 24, 66
26. scalene; right
27. $m\angle A = 86^\circ$, $m\angle B = 43^\circ$, $m\angle C = 51^\circ$
28. $m\angle 1 = 40^\circ$, $m\angle 2 = 40^\circ$, $m\angle 3 = 100^\circ$, Obtuse