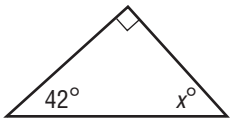
NAME _____ DATE _____ PERIOD _____

Lesson 3 Homework Practice

Triangles

Find the value of x.

1.



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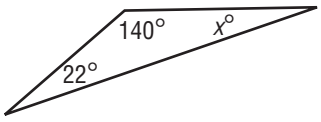
2.



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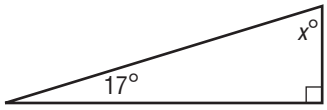
3.



73

Find the missing measure in each triangle with the given angle measures.

4. 45°, 35.8°, x° **99.2**

5. 100°, x°, 40.7° **39.3**

6. x°, 90°, 16.5° **73.5**

7. Find the third angle of a right triangle if one of the angles measures 24°. **66°**

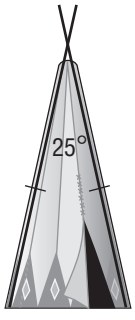
8. What is the third angle of a right triangle if one of the angles measures 51.1°? **38.9°**

9. ALGEBRA Find $m\angle A$ in $\triangle ABC$ if $m\angle B = 38°$ and $m\angle C = 38°$. **104°**

10. ALGEBRA In $\triangle XYZ$, $m\angle Z = 113°$ and $m\angle X = 28°$. What is $m\angle Y$? **39°**

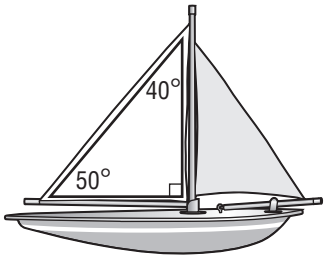
Classify the marked triangle in each object by its angles and by its sides.

11.



acute; isosceles

12.



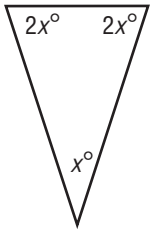
right; scalene

13.

obtuse; isosceles

ALGEBRA Find the value of x in each triangle.

14.



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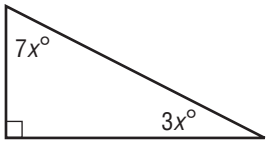
15.



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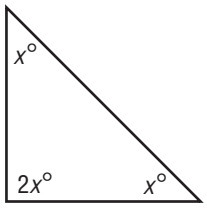
16.



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NAME _____ DATE _____ PERIOD _____

Lesson 3 Problem-Solving Practice

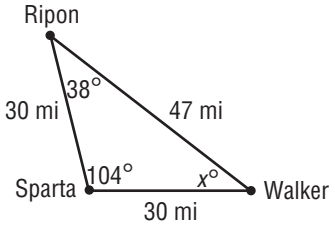
Triangles

1. TAILORING Each lapel on a suit jacket is in the shape of a triangle. The three angles of each triangle measure 47°, 68°, and 65°. Classify the triangle by its angles. **acute**

2. FLAGS A naval distress signal flag is in the shape of a triangle. The three sides of the triangle measure 5 feet, 9 feet, and 9 feet. Classify the triangle by its sides. **isosceles**

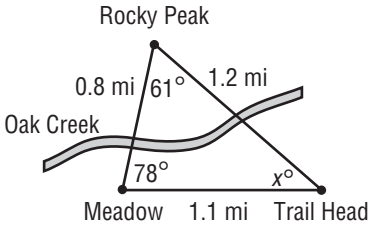
3. CARPENTRY The supports of a wood table are in the shape of a right triangle. Find the third angle of the triangle if the measure of one of the angles is 23°. **67°**

4. MAPS The three towns of Ripon, Sparta, and Walker form a triangle as shown below. Classify the triangle by its angles and by its sides. What is the value of x in the triangle?



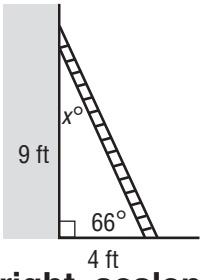
obtuse, isosceles; 38

5. HIKING The figure shows the Oak Creek trail, which is shaped like a triangle. Classify the triangle by its angles and by its sides. What is the value of x in the figure?



acute, scalene; 41

6. LADDER The figure shows a ladder leaning against a wall, forming a triangle. Classify the triangle by its angles and by its sides. What is the value of x in the figure?



right, scalene; 24