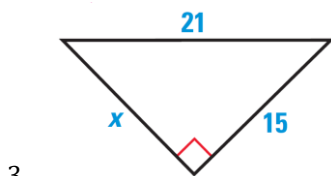
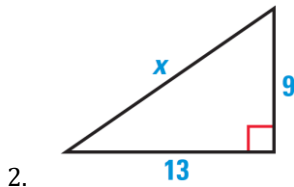
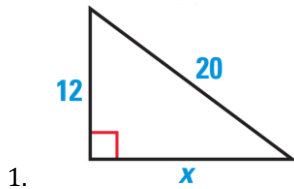


Geometry Chapter 9 Review

Find the value of x . Write your answer in simplest radical form.

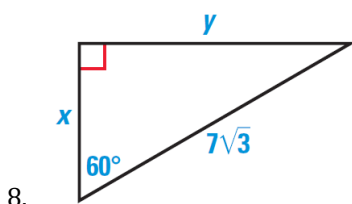
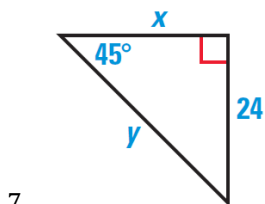
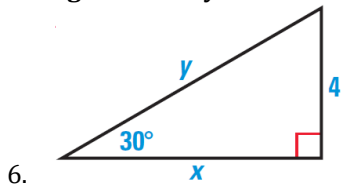


Classify the triangle as *acute*, *right*, or *obtuse*.

4. $5, 15, 5\sqrt{10}$

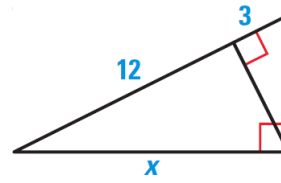
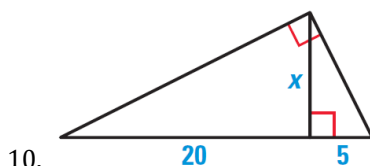
5. $4.3, 6.7, 8.2$

Find the value of each variable using the special right triangles. Write your answer in simplest radical form.

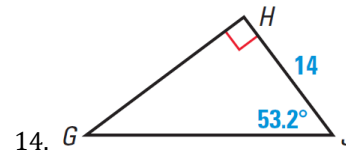
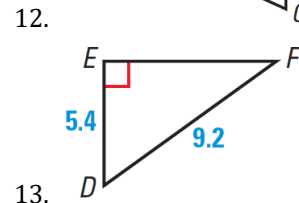
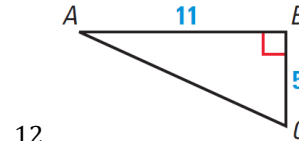


9. What is the geometric mean of 2 and 21?

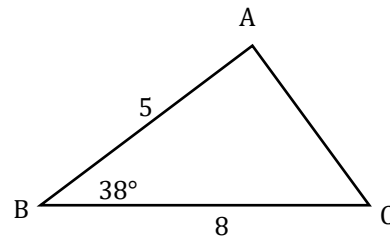
Find the exact value of x . (Use fractions and simplest radical form.)



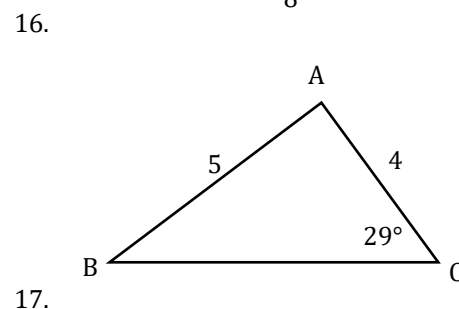
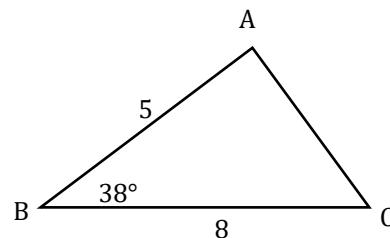
Solve the right triangle. Round your answers to the nearest tenth.



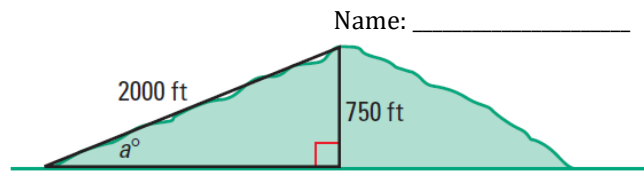
Find the area of $\triangle ABC$. Round to the nearest tenth if necessary.



Solve the triangle. Round to the nearest tenth.



18. The length of a hill in your neighborhood is 2000 feet. The height of the hill is 750 feet. What is the angle of elevation of the hill?



Answers

1. 16
2. $5\sqrt{10}$
3. $6\sqrt{6}$
4. Right
5. Obtuse
6. $4\sqrt{3}$; 8
7. 24; $24\sqrt{2}$
8. $\frac{7\sqrt{3}}{2}$; $\frac{21}{2}$
9. $\sqrt{42}$
10. 10
11. $6\sqrt{5}$
12. $A \approx 24.4^\circ$, $C \approx 65.6^\circ$, $AC \approx 12.1$
13. $D \approx 54.1^\circ$, $F \approx 35.9^\circ$, $EF \approx 7.4$
14. $G = 36.8^\circ$, $GH \approx 18.7$, $GJ \approx 23.4$
15. 12.3
16. $A = 104.8^\circ$, $b = 5.1$, $C = 37.2^\circ$
17. $a = 8.1$, $A = 128.2^\circ$, $B = 22.8^\circ$
18. About 22°