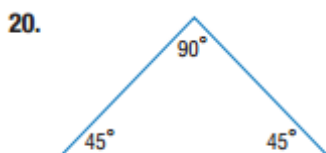
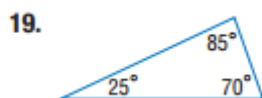
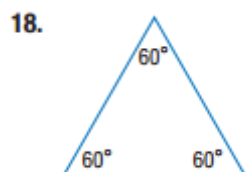
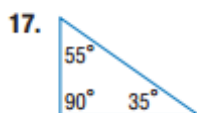
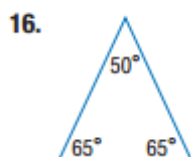
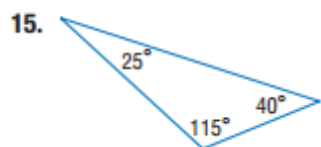


Classify each triangle as *acute*, *equiangular*, *obtuse*, or *right*.



Classify each triangle as *acute*, *equiangular*, *obtuse*, or *right*.

21. $\triangle UYZ$

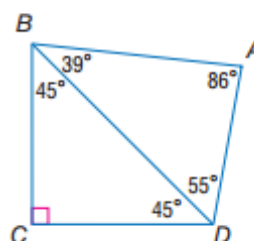
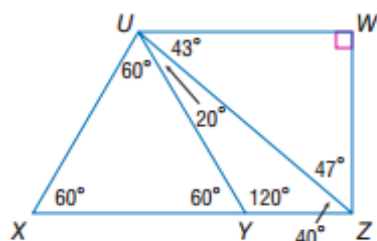
22. $\triangle BCD$

23. $\triangle ADB$

24. $\triangle UXZ$

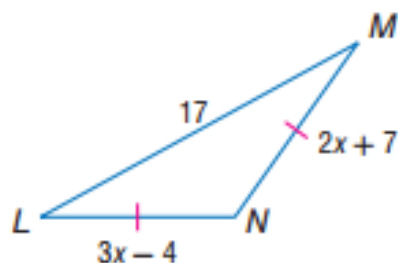
25. $\triangle UWZ$

26. $\triangle UXY$

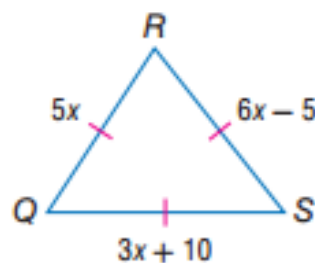


ALGEBRA Find x and the measures of the unknown sides of each triangle.

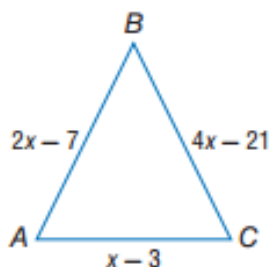
12.



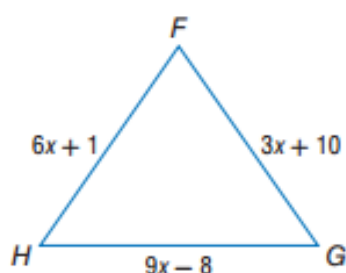
13.



36. **ALGEBRA** Find x and the length of each side if $\triangle ABC$ is an isosceles triangle with $\overline{AB} \cong \overline{BC}$.



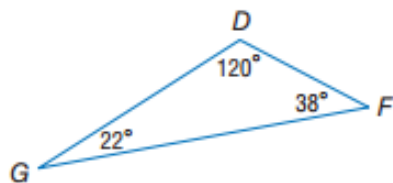
37. **ALGEBRA** Find x and the length of each side if $\triangle FGH$ is an equilateral triangle.



REBRA For each triangle, find x and the measure of each side.

- $\triangle FGH$ is an equilateral triangle with $FG = 3x - 10$, $GH = 2x + 5$, and $HF = x + 20$.
- $\triangle JKL$ is isosceles with $\overline{JK} \cong \overline{KL}$, $JK = 4x - 1$, $KL = 2x + 5$, and $LJ = 2x - 1$.
- $\triangle MNP$ is isosceles with $\overline{MN} \cong \overline{NP}$. MN is two less than five times x , NP is seven more than two times x , and PM is two more than three times x .
- $\triangle RST$ is equilateral. RS is three more than four times x , ST is seven more than two times x , and TR is one more than five times x .

56. **ERROR ANALYSIS** Elaina says that $\triangle DFG$ is obtuse. Ines disagrees, explaining that the triangle has more acute angles than obtuse angles so it must be acute. Is either of them correct? Explain your reasoning.



REASONING Determine whether the statements below are *sometimes*, *always*, or *never* true. Explain your reasoning.

- 57. Equiangular triangles are also right triangles.
- 58. Equilateral triangles are isosceles.
- 59. Right triangles are equilateral.
- 60. **CHALLENGE** An equilateral triangle has sides that measure $5x + 3$ units and $7x - 5$ units. What is the perimeter of the triangle? Explain.