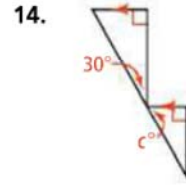
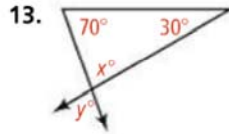
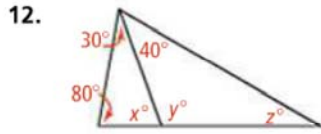
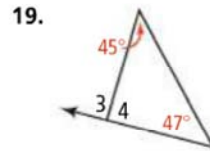
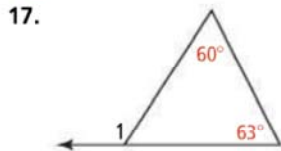


Homework: p.175-177: 12-14, 17-21, 25, 29-33 all

Algebra Find the value of each variable.



Algebra Find each missing angle measure.



20. A ramp forms the angles shown at the right. What are the values of a and b ?



See Problem 3

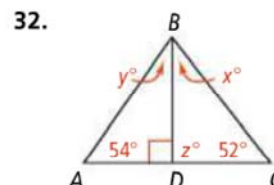
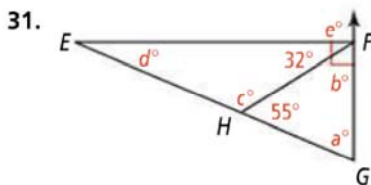
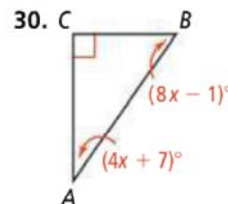
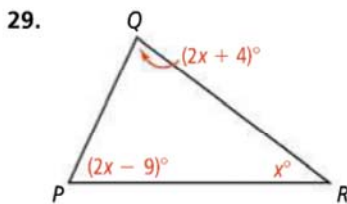
21. A lounge chair has different settings that change the angles formed by its parts. Suppose $m\angle 2 = 71$ and $m\angle 3 = 43$. Find $m\angle 1$.



25. Think About a Plan The angle measures of $\triangle RST$ are represented by $2x$, $x + 14$, and $x - 38$. What are the angle measures of $\triangle RST$?

- How can you use the Triangle Angle-Sum Theorem to write an equation?
- How can you check your answer?

Find the values of the variables and the measures of the angles.



33. Prove the Triangle Exterior Angle Theorem (Theorem 3-12).

Proof

The measure of each exterior angle of a triangle equals the sum of the measures of its two remote interior angles.

Given: $\angle 1$ is an exterior angle of the triangle.

Prove: $m\angle 1 = m\angle 2 + m\angle 3$

