## Isosceles and Equilateral Triangles- In class Practice

- 1. Refer to the figure.
  - **a.** What kind of triangle is  $\triangle QRS$ ?
  - **b.** Name the legs of  $\triangle QRS$ .
  - **c.** Name the base of  $\triangle QRS$ .
  - **d.** Name the vertex angle of  $\triangle QRS$ .
  - **e.** Name the base angles of  $\triangle QRS$ .



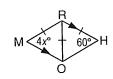
- 2. Determine whether each statement is always, sometimes, or never true.
  - a. If a triangle has three congruent sides, then it has three congruent angles.
  - **b.** If a triangle is isosceles, then it is equilateral.
  - c. If a right triangle is isosceles, then it is equilateral.
  - d. The largest angle of an isosceles triangle is obtuse.
  - e. If a right triangle has a 45° angle, then it is isosceles.
  - f. If an isosceles triangle has three acute angles, then it is equilateral.
  - g. The vertex angle of an isosceles triangle is the largest angle of the triangle.
- 3. Give the measures of the three angles of each triangle.
  - a. an equilateral triangle
  - b. an isosceles right triangle
  - ${f c.}$  an isosceles triangle in which the measure of the vertex angle is 70
  - d. an isosceles triangle in which the measure of a base angle is 70
  - e. an isosceles triangle in which the measure of the vertex angle is twice the measure of one of the base angles

## Find X.

4.



5



6

