## NAME

Module 8 Points, Lines, Angles, and Triangles
Lesson 6 Similar Triangles

Tell if each statement is true or false. If false, draw two triangles that prove it false.

Additional

1. All right triangles are similar.

2. All equilateral triangles are similar.

True
3. All isosceles triangles are similar.

False


Solve.
4. The triangles at right are similar. Find the value of $x$.

$$
4 \frac{1}{5}
$$


5. If $\triangle P E G \sim \triangle B O Y$ and $m \angle P=130^{\circ}$ and $m \angle O=30^{\circ}$, what is $m \angle G$ ?
6. In the figure at right, $\overline{A B} \| \overline{C D}$.
a. Tell why $\angle A \cong \angle C$ and why $\angle B \cong \angle D$.

When two parallel lines are cut by a transversal, the corresponding angles are congruent.

b. Tell why $\triangle A B E \sim \triangle C D E$.

## AA Similarity Rule

c. Find $A B$, the length across the lake.

$$
6 \frac{2}{3} \text { miles }
$$

