

- 1) **BIOLOGY** Out of 274 listed species of birds in the United States, 78 species made the endangered list. Find the ratio of endangered species of birds to listed species in the United States.
- 2) **ART** An artist in Portland, Oregon, makes bronze sculptures of dogs. The ratio of the height of a sculpture to the actual height of the dog is 2:3. If the height of the sculpture is 14 inches, find the height of the dog.

Solve each proportion.

3) $\frac{2}{5} = \frac{x}{40}$

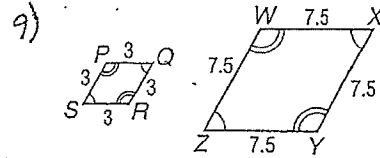
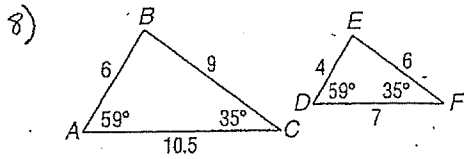
4) $\frac{7}{10} = \frac{21}{x}$

5) $\frac{20}{5} = \frac{4x}{6}$

Find the measures of the sides of each triangle.

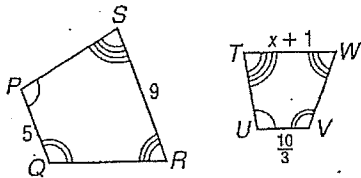
- 6) The ratio of the measures of the sides of a triangle is 3:5:7, and its perimeter is 450 centimeters.
- 7) The ratio of the measures of the sides of a triangle is 5:6:9, and its perimeter is 220 meters.

Determine whether each pair of figures is similar. Justify your answer.

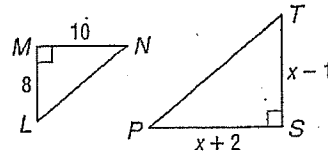


Each pair of polygons is similar. Write a similarity statement, and find x , the measure(s) of the indicated side(s), and the scale factor.

10) \overline{WT}



11) \overline{TS} and \overline{SP}



Determine whether each pair of triangles is similar. Justify your answer.

