

## Exercises

## and Alg Review Sem 2 Week 6 WS

- A high school has 16 math teachers for 1856 math students. What is the ratio of math teachers to math students?
- The measures of two complementary angles are in the ratio 2 : 3. What is the measure of the smaller angle?

### Algebra Solve each proportion.

7.  $\frac{x}{7} = \frac{18}{21}$

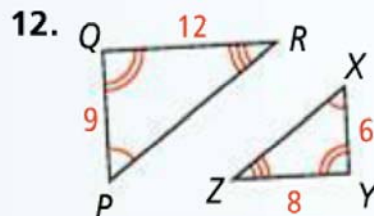
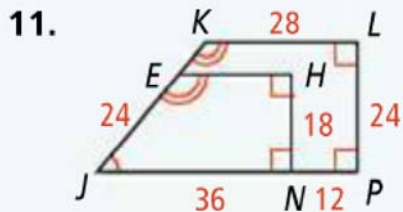
8.  $\frac{6}{11} = \frac{15}{2x}$

9.  $\frac{x}{3} = \frac{x+4}{5}$

10.  $\frac{8}{x+9} = \frac{2}{x-3}$

## Exercises

The polygons are similar. Write a similarity statement and give the scale factor.



- City Planning** The length of a rectangular playground in a scale drawing is 12 in. If the scale is 1 in. = 10 ft, what is the actual length?
- Indirect Measurement** A 3-ft vertical post casts a 24-in. shadow at the same time a pine tree casts a 30-ft shadow. How tall is the pine tree?

Are the triangles similar? How do you know?

