### 7.1 Proportions \& Ratios

What is the ratio of boys to girls in this class?
What is the ratio of girls to students in this class?
To solve a proportion, $\qquad$
Ex1. Solve

$$
\frac{4 x-5}{3}=-\frac{26}{6}
$$

Ex2. In a triangle, the ratio of measures of 3 sides is 5:12:13 and the perimeter is 90 in . Find the measure of the shortest side.

### 7.2 Similar Figures

Similar Figures have same $\qquad$ but may be different $\qquad$ .

Similar figures must have: 1) $\qquad$ corresponding angles AND
2) sides that are $\qquad$ (same $\qquad$ ).

The ratio of sides is called the $\qquad$ .

Are congruent figures also similar?

Ex 2: Determine if the triangles are similar.
Are corresponding angles equal?

Are corresponding sides proportional?


## Similarity statement:

Ex3
a). Find $x$.

b). Find the scale factor.
c). Find GF.

Ex4 Rectangle QRST is similar to rectangle JKLM with a scale factor of 1.5. If the length and width of rectangle QRST are 10 cm and 4 cm , what are the length and width of rectangle JKLM?

