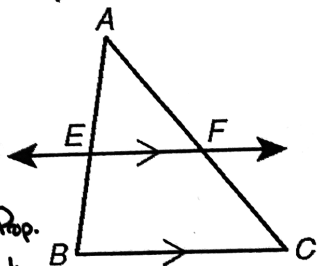


*Key will be on my website
 Similarity Quiz 2 Review

Know this proof. ALL Steps + justifications!

Given: $\overline{EF} \parallel \overline{BC}$.

Prove: $\frac{AE}{EB} = \frac{AF}{FC}$



$\angle A \cong \angle A$ Reflexive Prop.

$\angle AEF \cong \angle EBC$ corresponding angles theorem

$\triangle AEF \sim \triangle ABC$ by AA~

$$\frac{AB}{AE} = \frac{AC}{AF}$$

Corresponding parts are proportional

$$\frac{AE+EB}{AE} = \frac{AF+FC}{AF}$$

$$\frac{AE}{AE} + \frac{EB}{AE} = \frac{AF}{AF} + \frac{FC}{AF}$$

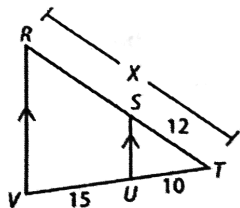
$$1 + \frac{EB}{AE} = 1 + \frac{FC}{AF}$$

$$\frac{EB}{AE} = \frac{FC}{AF}$$

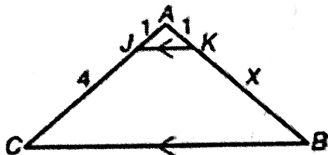
$$\frac{AE}{EB} = \frac{AF}{FC}$$

What is the value of x in these pictures?

1.

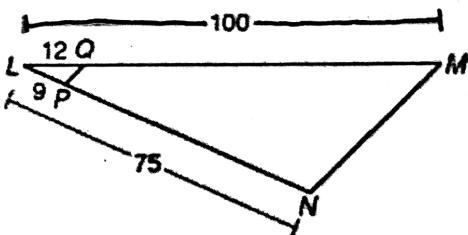


2.

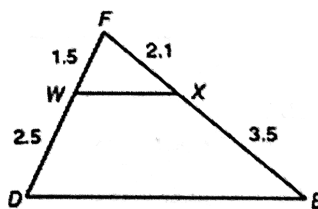


Is each set of lines parallel? How do you know?

3. $\overline{QP} \parallel \overline{MN}$



4. $\overline{WX} \parallel \overline{DE}$



5. A person who is 6 feet tall casts a shadow of 3.2 feet. A building at the same time of day casts a shadow of 18.5 feet. How tall is the building? Draw a picture.

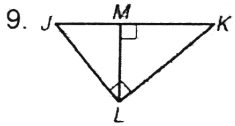
Find the point, P, that divides each directed line segment in the ratio provided.

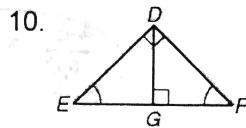
6. A (-1, 4) B (-9, 0) ; 1 to 3

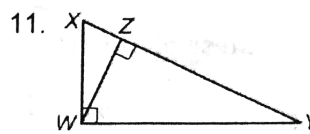
7. A (7, -3) B (-7, 4) ; 3 to 4

8. A (-1, 5) B (7, -3) ; 7 to 1

Write a similarity statement comparing the three triangles in each diagram.







Write in simplest radical form.

Find x, y, and z. ~~Round to the nearest tenth if necessary.~~

