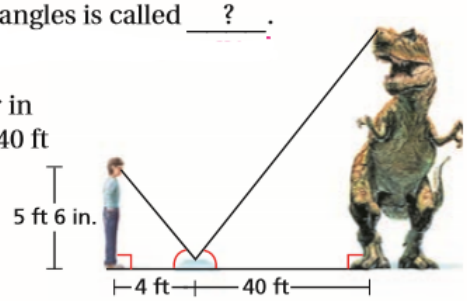
Green Textbook Page 505 #1, 2, 10-12, 32, 36

and Page 498 #6-11, 26, 27

1. **Vocabulary** Finding distances using similar triangles is called ___?___. (*indirect measurement* or *scale drawing*)

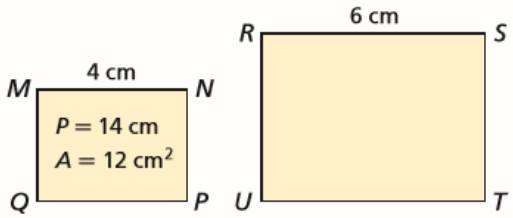
2. **Measurement** To find the height of a dinosaur in a museum, Amir placed a mirror on the ground 40 ft from its base. Then he stepped back 4 ft so that he could see the top of the dinosaur in the mirror. Amir's eyes were approximately 5 ft 6 in. above the ground. What is the height of the dinosaur?



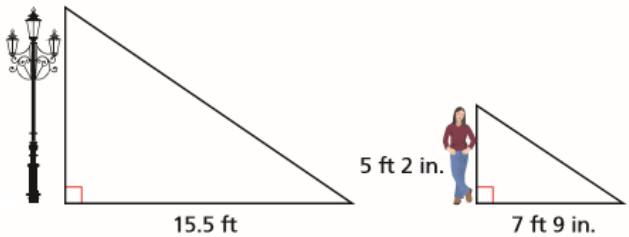
Given: rectangle *MNPQ* ~ rectangle *RSTU*

10. Find the perimeter of rectangle *RSTU*.

11. Find the area of rectangle *RSTU*.

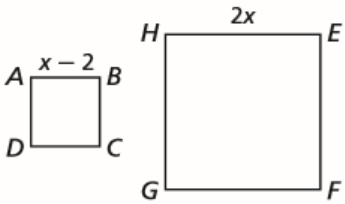


12. **Measurement** Jenny is 5 ft 2 in. tall. To find the height of a light pole, she measured her shadow and the pole's shadow. What is the height of the pole?



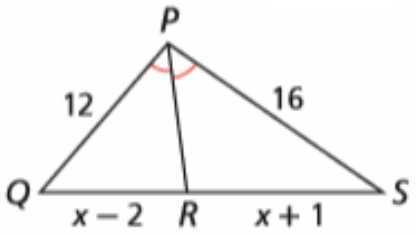
32. **Estimation** The photo shows a person who is 5 ft 1 in. tall standing by a statue in Jamestown, North Dakota. Estimate the actual height of the head of the statue by using a ruler to measure her height and the height of the head of the statue in the photo.

36. The ratio of the perimeter of square *ABCD* to the perimeter of square *EFGH* is $\frac{4}{9}$. Find the side lengths of each square.

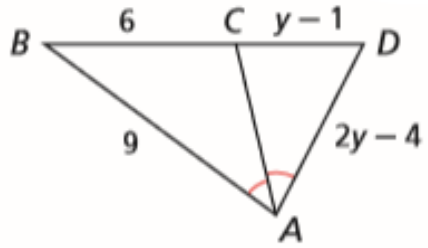


Find the length of each segment.

6. $\overline{QR}$ and $\overline{RS}$

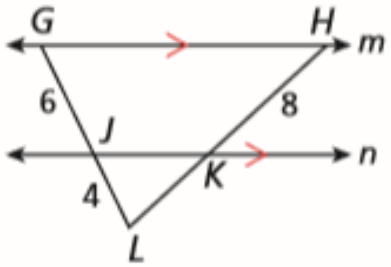


7. $\overline{CD}$ and $\overline{AD}$

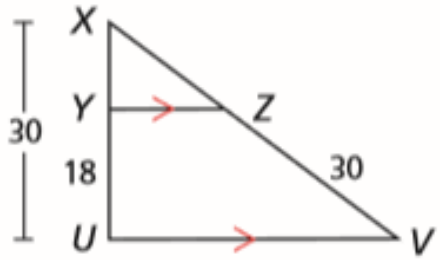


Find the length of each segment.

8. $\overline{KL}$

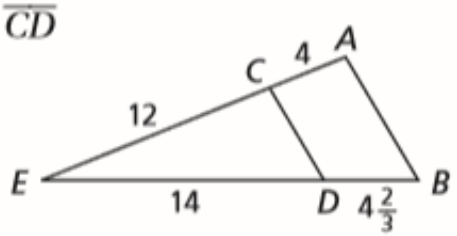


9. $\overline{XZ}$

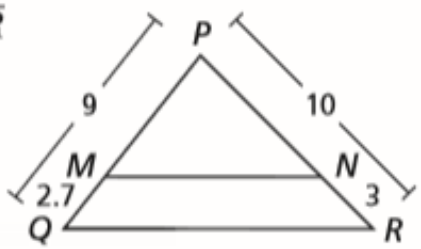


Verify that the given segments are parallel.

10. $\overline{AB}$ and $\overline{CD}$

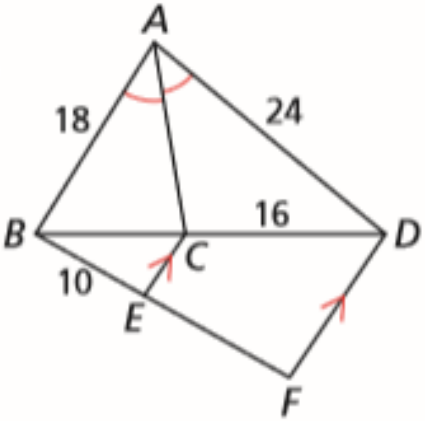


11. $\overline{MN}$ and $\overline{QR}$



Find the length of each segment.

26. $\overline{EF}$



27. $\overline{ST}$