7-3 Solve It!

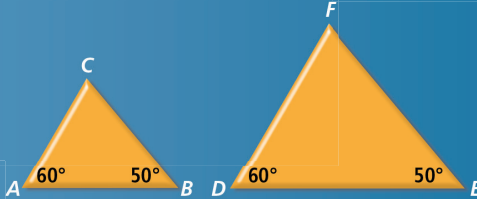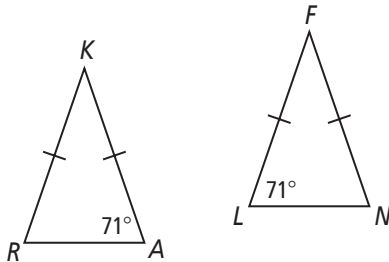Are the triangles similar? How do you know? (Hint: Use a centimeter ruler to measure the sides of each triangle.)

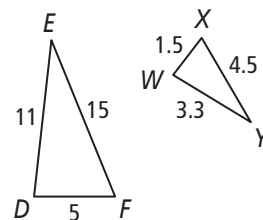You've already learned how to decide whether two polygons are similar. Use the same strategy here.

C

F

A 60°   50° B   D 60°   50° E

7-3 Lesson Quiz

1. Are $\triangle KRA$ and $\triangle FLN$ similar? How do you know?

K

F

71°

71°

R   A

L   N

2. Do you UNDERSTAND? A flagpole casts a shadow 18 ft long. At the same time, Rachael casts a shadow that is 4 ft long. If Rachael is 5 ft tall, what is the height of the flagpole?

3. Are the triangles similar? If so, what is the similarity statement?

E

X

1.5

4.5

W

11   15   3.3

Y

D   5   F

Answers

Solve It!

Yes; corresp. ∠s are ≅ and corresp. sides are proportional.

Lesson Quiz

1. yes; by the AA Similarity Postulate

2. 22 ft 6 in.

3. yes; $\triangle DEF \sim \triangle WYX$