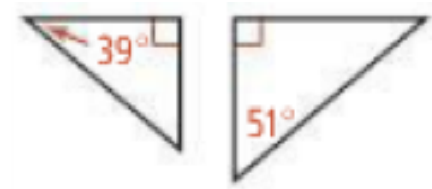
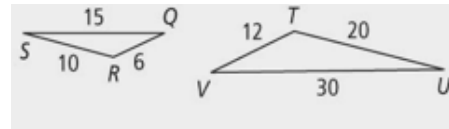


6-7 Homework: Similarity ratio problems

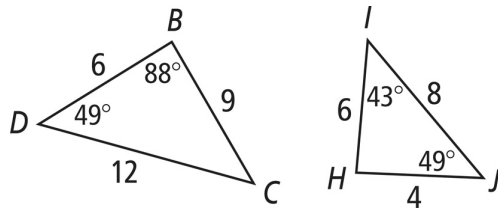
1. Are the two triangles similar? Explain how you know and be sure to name the postulate or theorem if applicable.



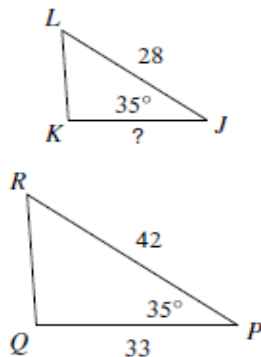
2. Are the two triangles similar? Explain how you know and be sure to name the postulate or theorem if applicable.



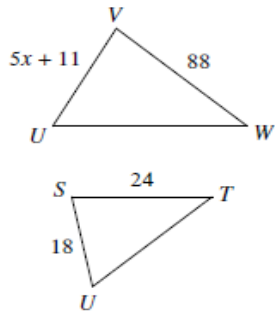
3. Name the three ways (postulates or theorems) to prove these two triangles similar and use the numbers to justify.



4. Solve for side KJ.

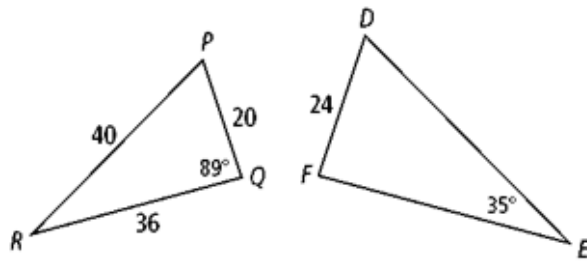


5. Solve for x.

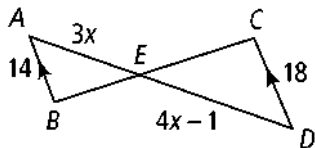


6. In the diagram below, $\triangle PRQ \sim \triangle DEF$. Find each of the following.

1. the scale factor of $\triangle PRQ$ to $\triangle DEF$
2. $m\angle D$
3. $m\angle R$
4. $m\angle P$
5. DE
6. FE



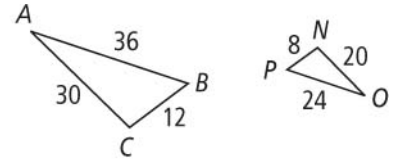
7. Solve for x.



8.

Given: $AB=36$, $AC=30$, $BC=12$, $PN=8$, $NO=20$, $PO=24$

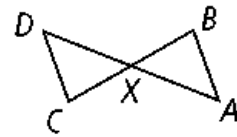
Prove: Triangle $ABC \sim$ Triangle OPN



9.

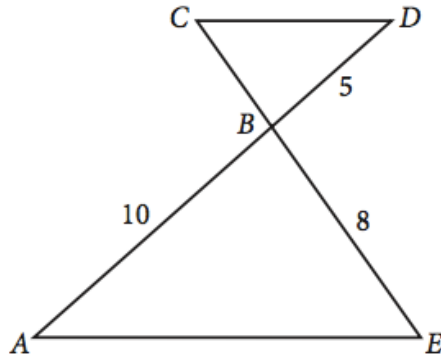
Given: $AB \parallel DC$

Prove: Triangle $XDC \sim$ Triangle XAB



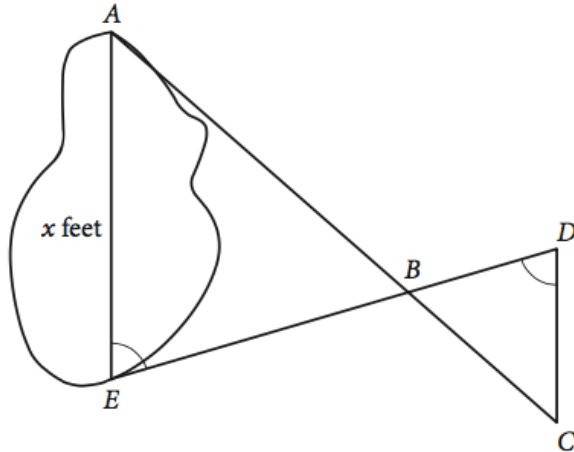
Similarity SAT Problems

18



In the figure above, $\overline{AE} \parallel \overline{CD}$ and segment AD intersects segment CE at B . What is the length of segment CE ?

17



A summer camp counselor wants to find a length, x , in feet, across a lake as represented in the sketch above. The lengths represented by AB , EB , BD , and CD on the sketch were determined to be 1800 feet, 1400 feet, 700 feet, and 800 feet, respectively. Segments AC and DE intersect at B , and $\angle AEB$ and $\angle CDB$ have the same measure. What is the value of x ?