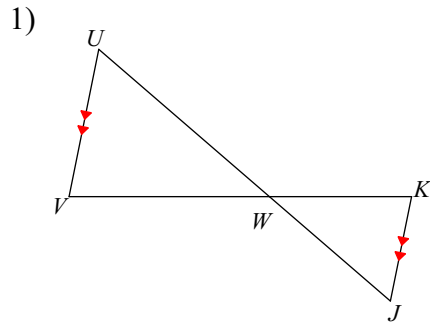
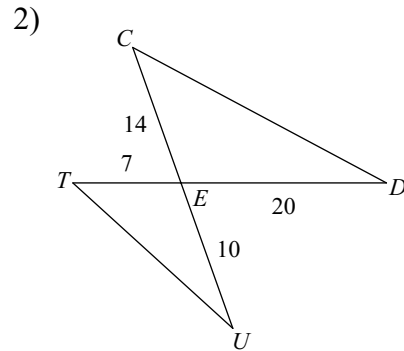


# Proving Triangles Similar

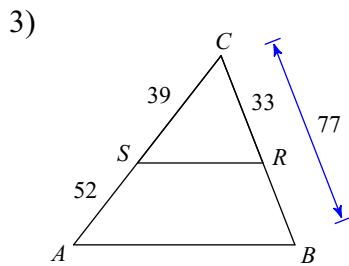
State if the triangles in each pair are similar. If so, state how you know they are similar and complete the similarity statement.



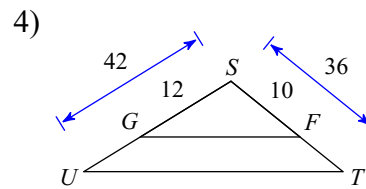
$\triangle WVU \sim$  \_\_\_\_\_



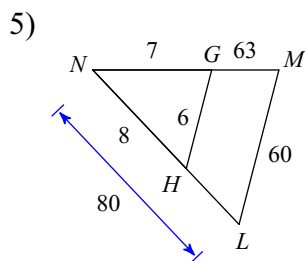
$\triangle EDC \sim$  \_\_\_\_\_



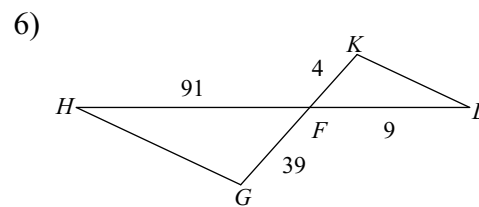
$\triangle CBA \sim$  \_\_\_\_\_



$\triangle STU \sim$  \_\_\_\_\_

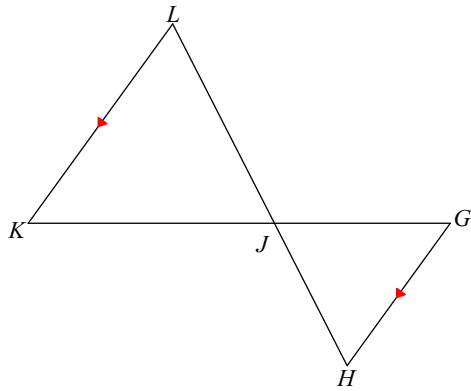


$\triangle NML \sim$  \_\_\_\_\_



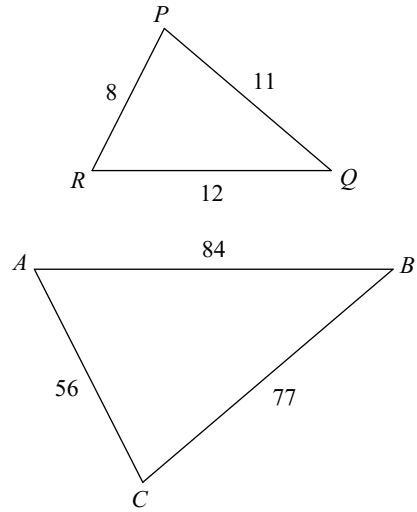
$\triangle FGH \sim$  \_\_\_\_\_

7)



$\triangle JKL \sim$  \_\_\_\_\_

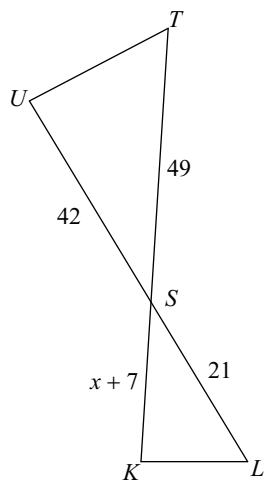
8)



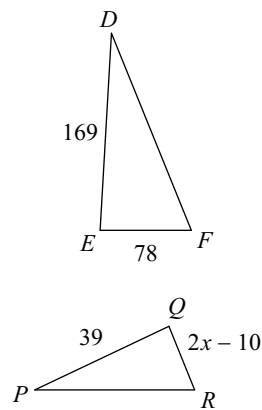
$\triangle CBA \sim$  \_\_\_\_\_

**Solve for  $x$ . The triangles in each pair are similar.**

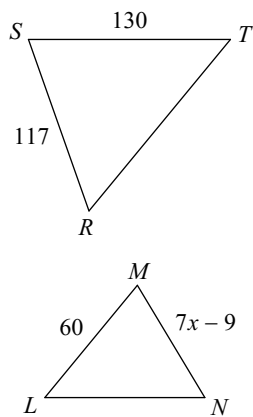
9)



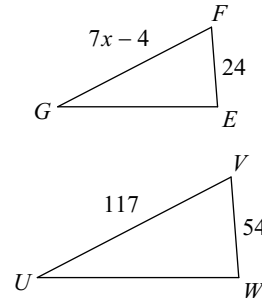
10)



11)

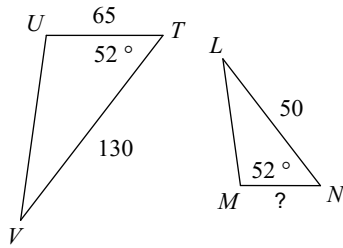


12)

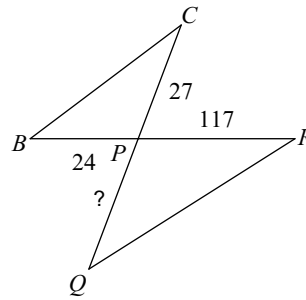


Find the missing length. The triangles in each pair are similar.

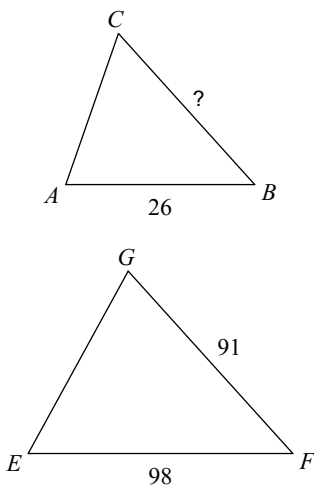
13)



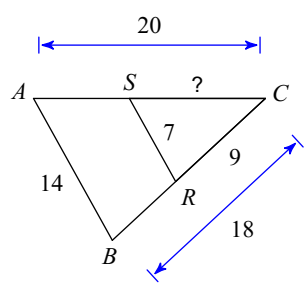
14)



15)



16)



## Answers to Proving Triangles Similar (ID: 1)

- |   |   |        |        |
|---|---|--------|--------|
| 1) similar; AA similarity; $\triangle WKJ$  | 2) similar; SAS similarity; $\triangle EUT$ |        |        |
| 3) similar; SAS similarity; $\triangle CRS$ | 4) not similar                              |        |        |
| 5) similar; SSS similarity; $\triangle NGH$ | 6) not similar                              |        |        |
| 7) similar; AA similarity; $\triangle JGH$  | 8) similar; SSS similarity; $\triangle PQR$ |        |        |
| 9) 11                                       | 10) 14                                      | 11) 9  | 12) 8  |
| 13) 25                                      | 14) 104                                     | 15) 28 | 16) 10 |