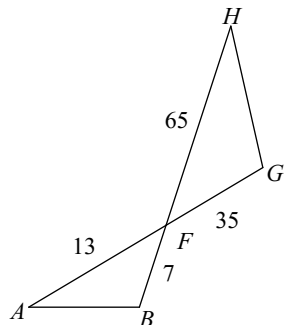


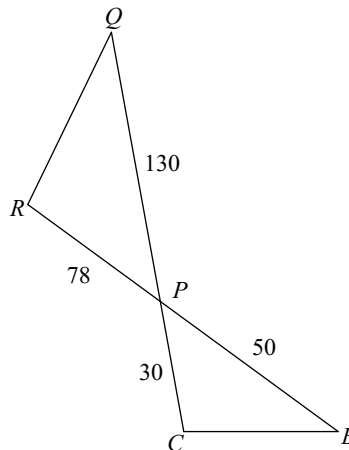
State if the triangles in each pair are similar. If so, state how you know they are similar and complete the similarity statement.

1)



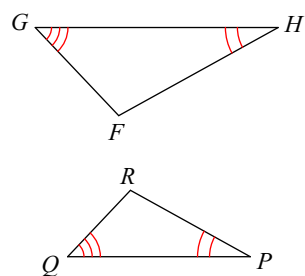
$\triangle FGH \sim$ _____

2)



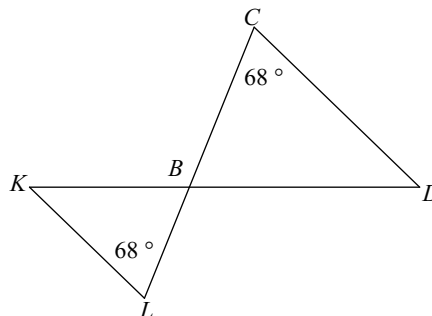
$\triangle PQR \sim$ _____

3)



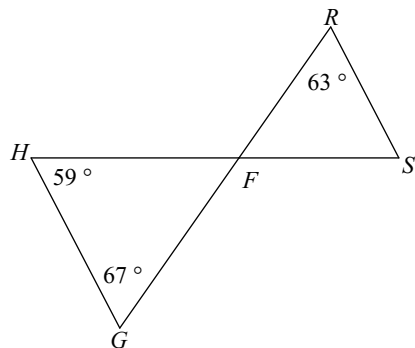
$\triangle HGF \sim$ _____

4)



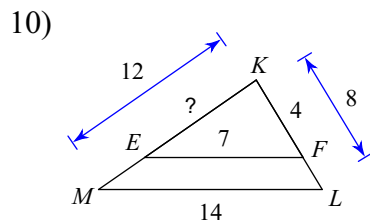
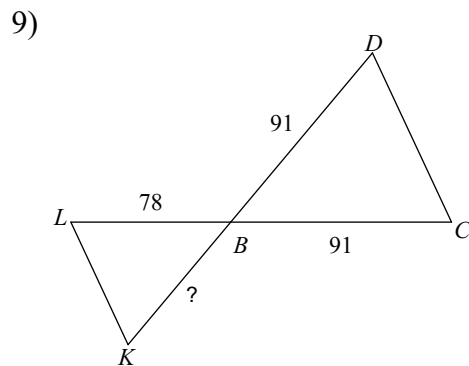
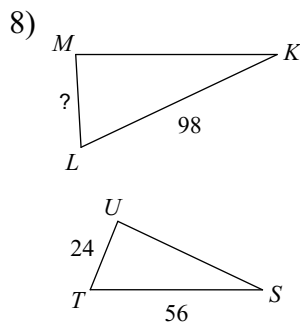
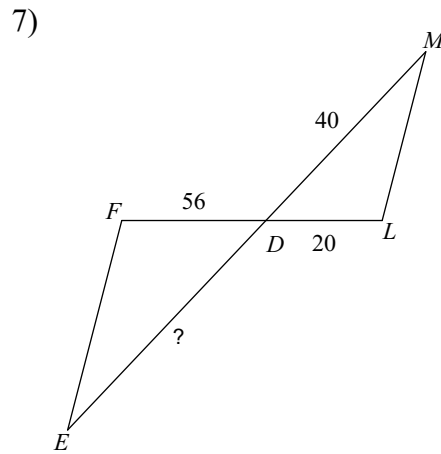
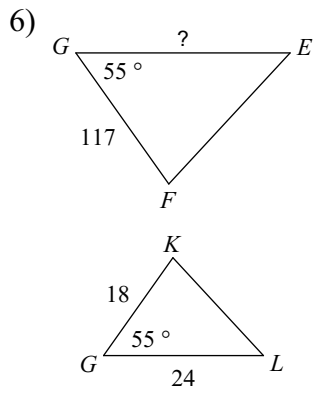
$\triangle BCD \sim$ _____

5)

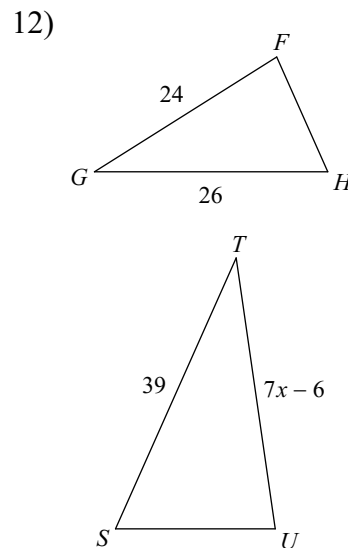
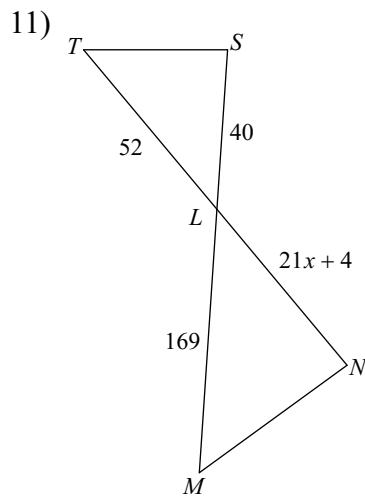


$\triangle FGH \sim$ _____

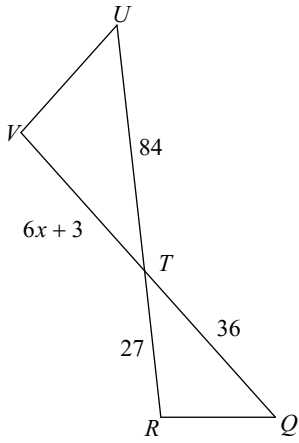
Find the missing length. The triangles in each pair are similar.



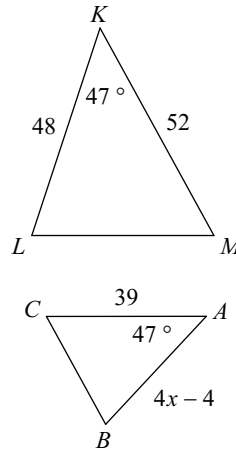
Solve for x . The triangles in each pair are similar.



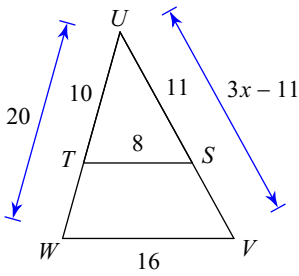
13)



14)

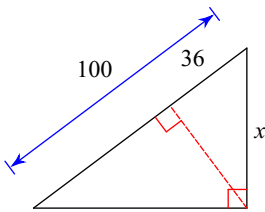


15)

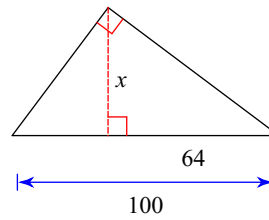


Find the missing length indicated. Leave your answer in simplest radical form.

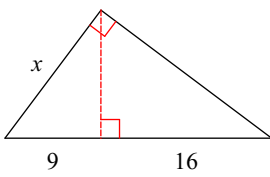
16)



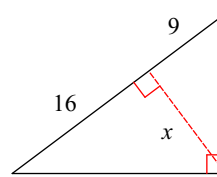
17)



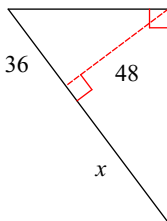
18)



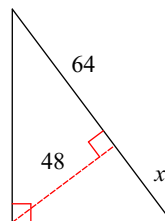
19)



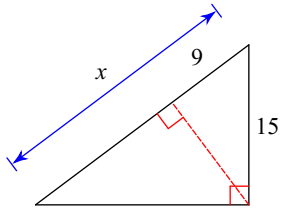
20)



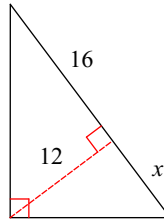
21)



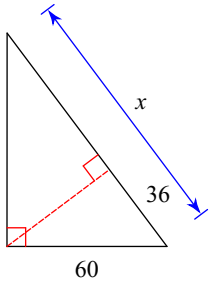
22)



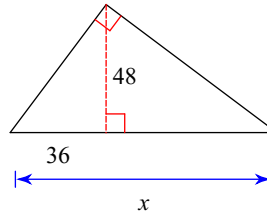
23)



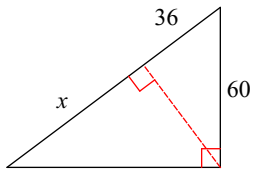
24)



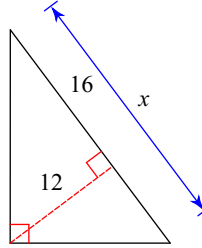
25)



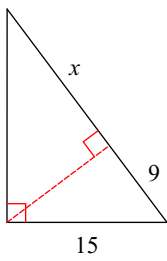
26)



27)



28)



Answers to (ID: 1)

- | | | | |
|---|---|--------|---------|
| 1) similar; SAS similarity; $\triangle FBA$ | 2) similar; SAS similarity; $\triangle PBC$ | | |
| 3) similar; AA similarity; $\triangle PQR$ | 4) similar; AA similarity; $\triangle BLK$ | | |
| 5) not similar | 6) 156 | 7) 112 | 8) 42 |
| 9) 78 | 10) 6 | 11) 6 | 12) 6 |
| 13) 10 | 14) 10 | 15) 11 | 16) 60 |
| 17) 48 | 18) 15 | 19) 12 | 20) 64 |
| 21) 36 | 22) 25 | 23) 9 | 24) 100 |
| 25) 100 | 26) 64 | 27) 25 | 28) 16 |