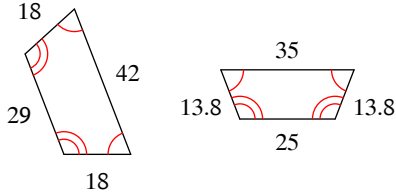


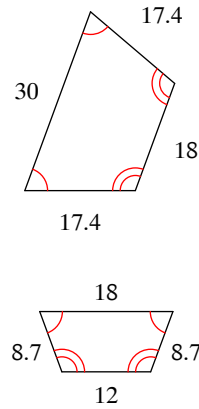
Chapter 7: Proportions and Similarity

State if the polygons are similar.

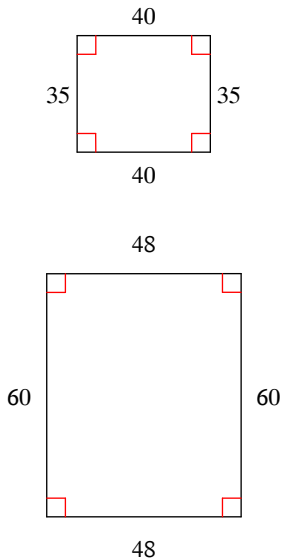
1)



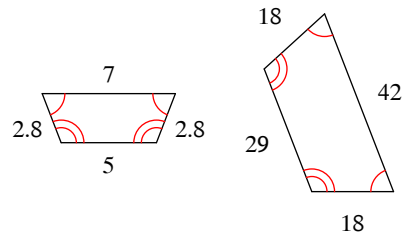
2)



3)

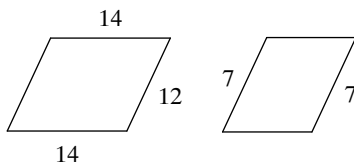


4)

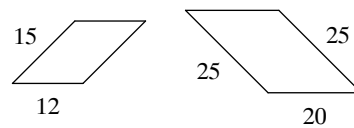


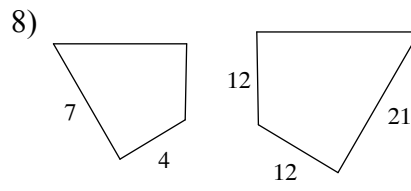
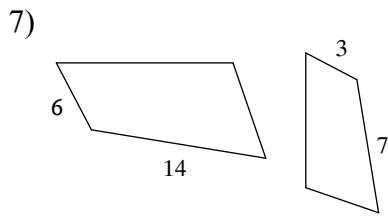
The polygons in each pair are similar. Find the scale factor of the smaller figure to the larger figure.

5)

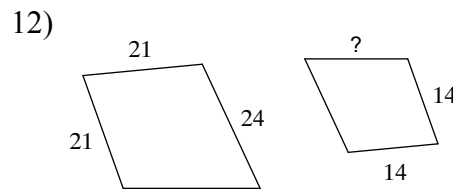
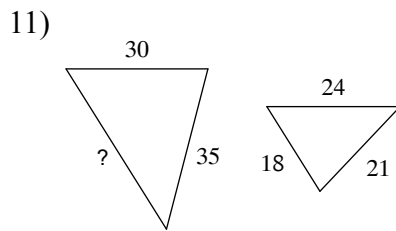
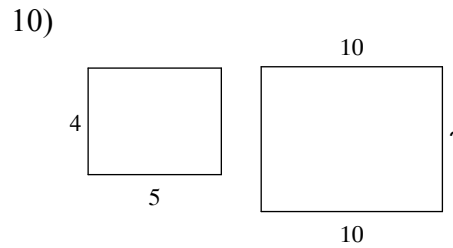
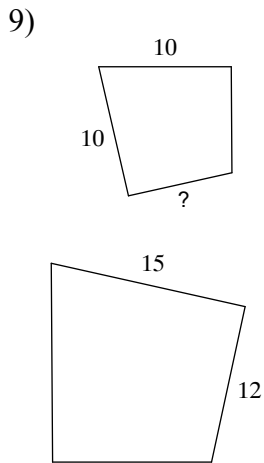


6)

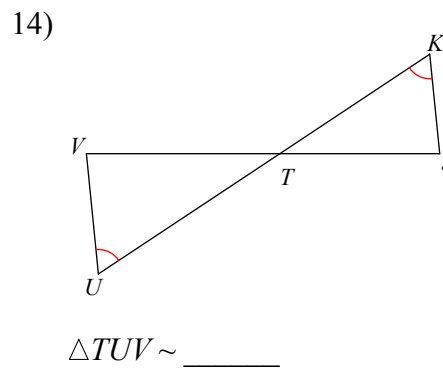
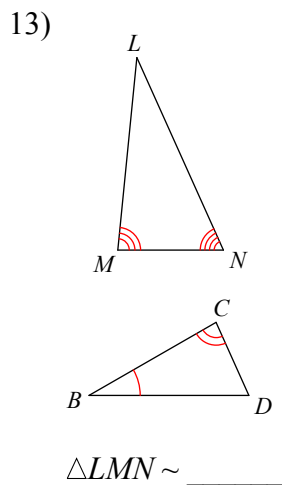




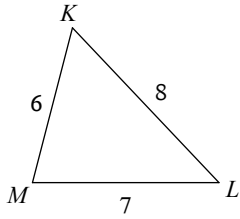
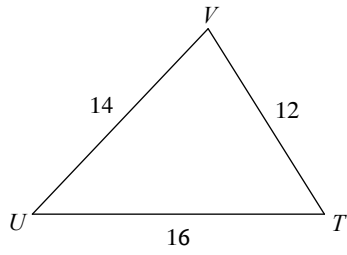
The polygons in each pair are similar. Find the missing side length.



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

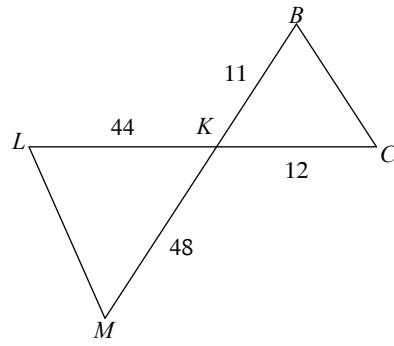


15)



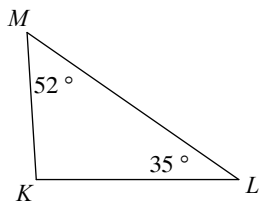
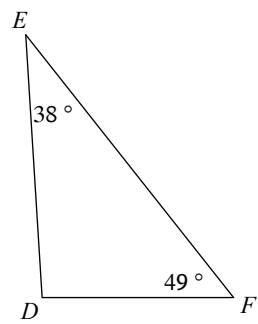
$\triangle TUV \sim$ _____

16)



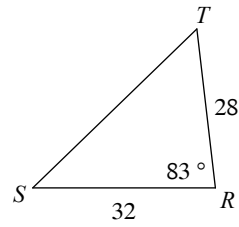
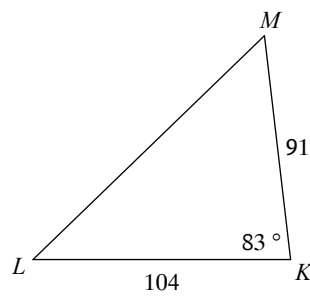
$\triangle KLM \sim$ _____

17)



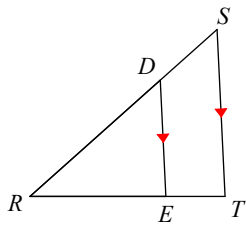
$\triangle FED \sim$ _____

18)



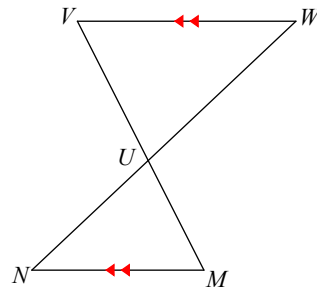
$\triangle KLM \sim$ _____

19)



$\triangle RST \sim$ _____

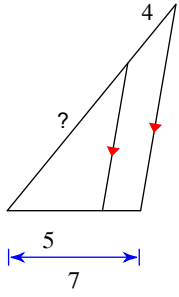
20)



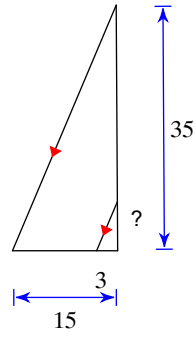
$\triangle UVW \sim$ _____

Find the missing length indicated.

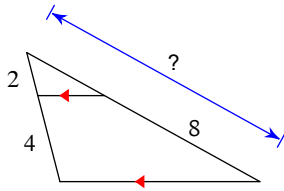
21)



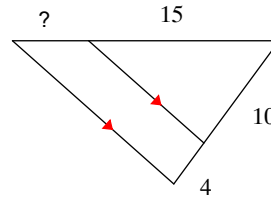
22)



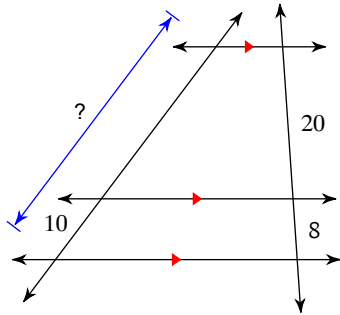
23)



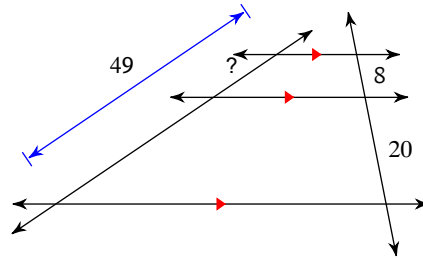
24)



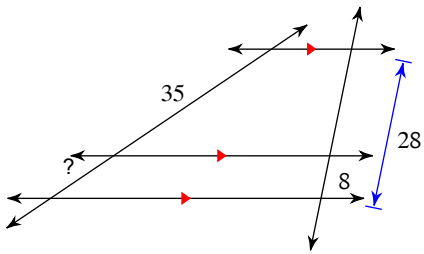
25)



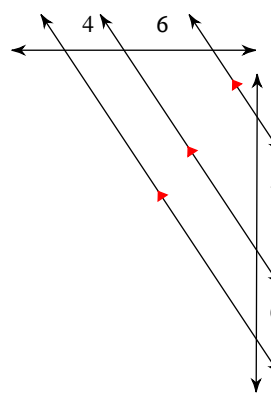
26)



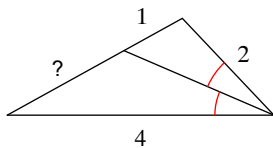
27)



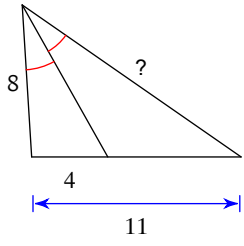
28)



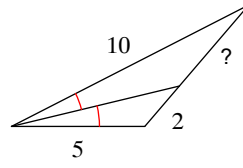
29)



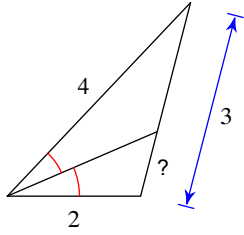
30)



31)



32)



Answers to Chapter 7: Proportions and Similarity (ID: 2)

- | | | | |
|--|--|--|----------------|
| 1) not similar | 2) not similar | 3) not similar | 4) not similar |
| 5) 1 : 2 | 6) 3 : 5 | 7) 1 : 2 | 8) 1 : 3 |
| 9) 8 | 10) 8 | 11) 40 | 12) 16 |
| 13) not similar | 14) similar; AA similarity; $\triangle TKJ$ | | |
| 15) similar; SSS similarity; $\triangle KLM$ | | 16) similar; SAS similarity; $\triangle KBC$ | |
| 17) not similar | 18) similar; SAS similarity; $\triangle RST$ | | |
| 19) similar; AA similarity; $\triangle RDE$ | | 20) similar; AA similarity; $\triangle UMN$ | |
| 21) 10 | 22) 7 | 23) 12 | 24) 6 |
| 25) 35 | 26) 14 | 27) 14 | 28) 9 |
| 29) 2 | 30) 14 | 31) 4 | 32) 1 |