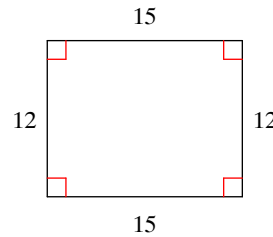
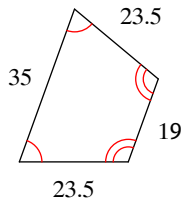
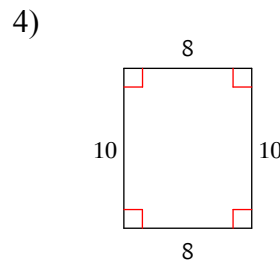
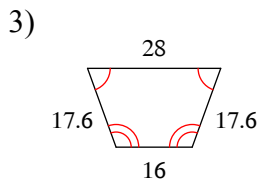
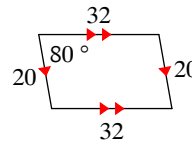
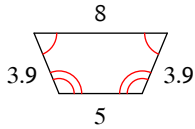
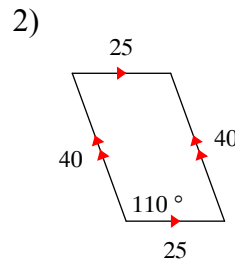
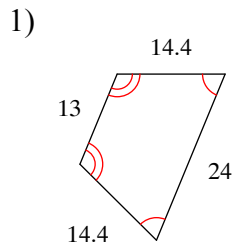
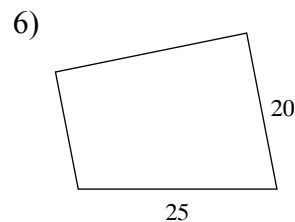
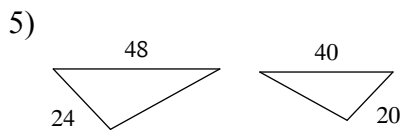


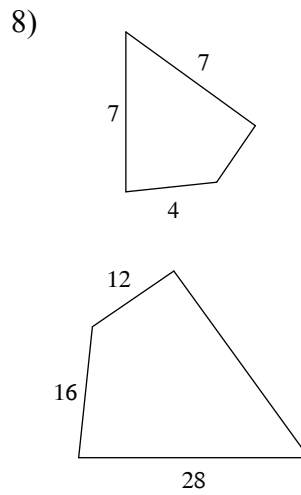
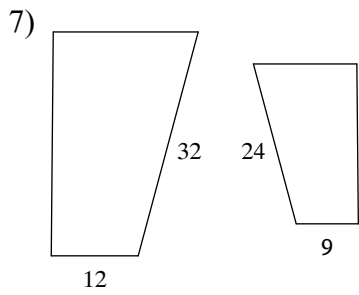
Chapter 7: Proportions and Similarity

State if the polygons are similar.

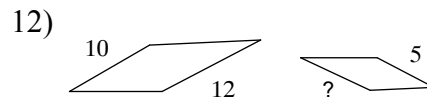
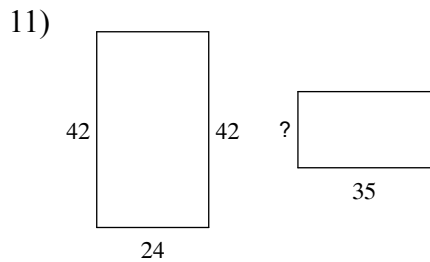
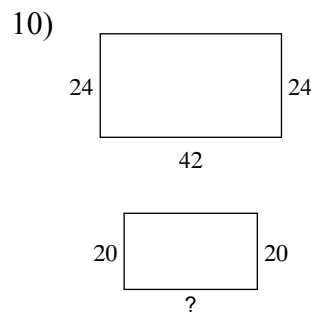
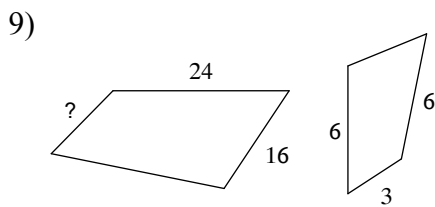


The polygons in each pair are similar. Find the scale factor of the smaller figure to the larger figure.

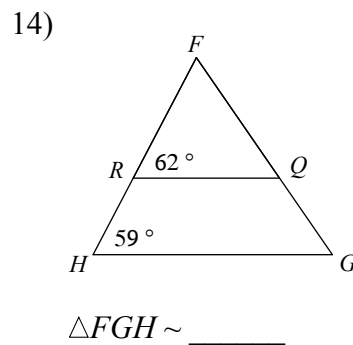
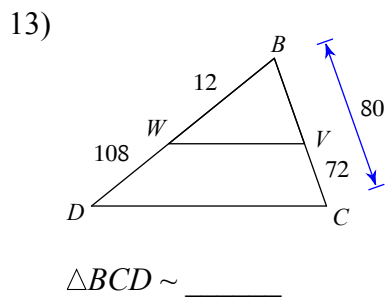




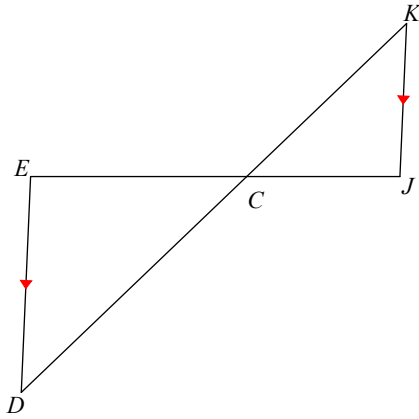
The polygons in each pair are similar. Find the missing side length.



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

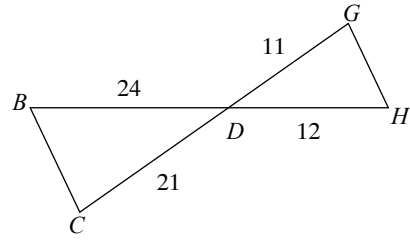


15)



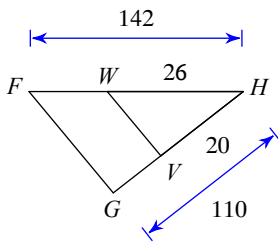
$\triangle CDE \sim$  \_\_\_\_\_

16)



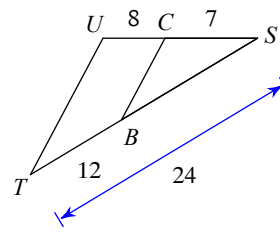
$\triangle DCB \sim$  \_\_\_\_\_

17)



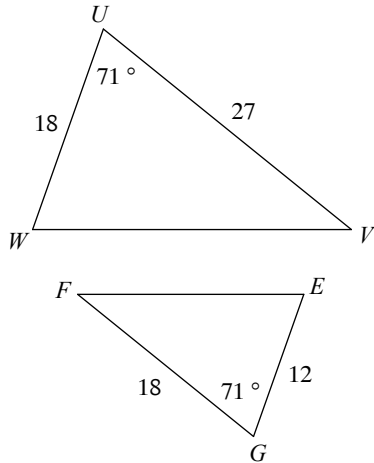
$\triangle HGF \sim$  \_\_\_\_\_

18)



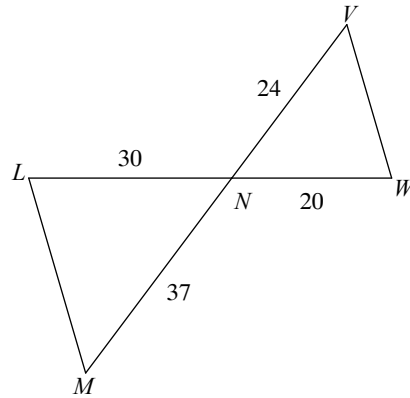
$\triangle STU \sim$  \_\_\_\_\_

19)



$\triangle UVW \sim$  \_\_\_\_\_

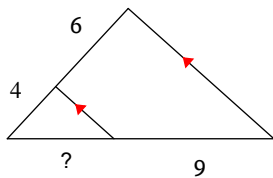
20)



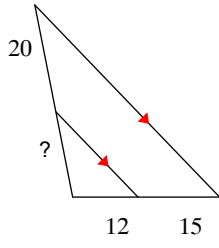
$\triangle NML \sim$  \_\_\_\_\_

**Find the missing length indicated.**

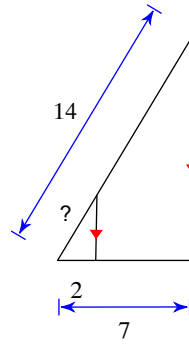
21)



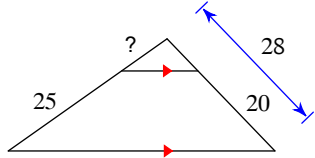
22)



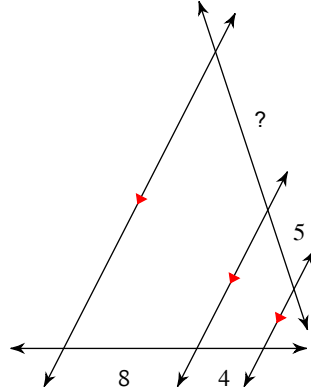
23)



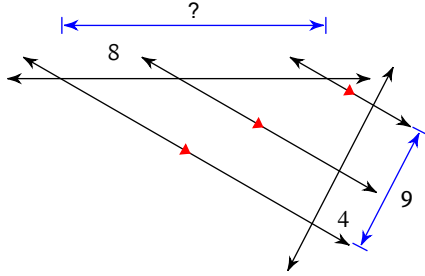
24)



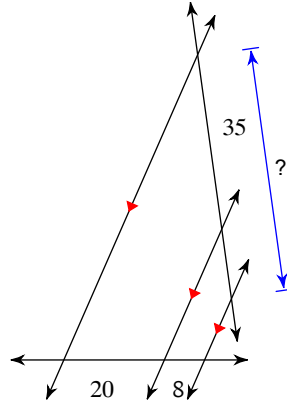
25)



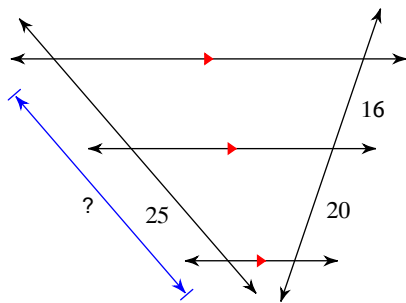
26)



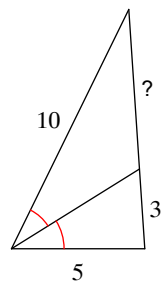
27)



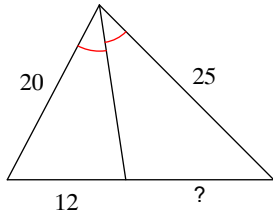
28)



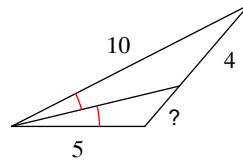
29)



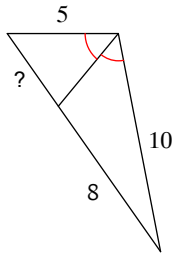
30)



31)



32)



## Answers to Chapter 7: Proportions and Similarity (ID: 1)

- |                                              |                                              |                 |                 |
|----------------------------------------------|----------------------------------------------|-----------------|-----------------|
| 1) not similar                               | 2) not similar                               | 3) not similar  | 4) similar      |
| 5) 5 : 6                                     | 6) 4 : 5                                     | 7) 3 : 4        | 8) 1 : 4        |
| 9) 12                                        | 10) 35                                       | 11) 20          | 12) 6           |
| 13) similar; SAS similarity; $\triangle BVW$ |                                              | 14) not similar |                 |
| 15) similar; AA similarity; $\triangle CKJ$  |                                              | 16) not similar | 17) not similar |
| 18) not similar                              | 19) similar; SAS similarity; $\triangle GFE$ |                 | 20) not similar |
| 21) 6                                        | 22) 16                                       | 23) 4           | 24) 10          |
| 25) 10                                       | 26) 18                                       | 27) 49          | 28) 45          |
| 29) 6                                        | 30) 15                                       | 31) 2           | 32) 4           |