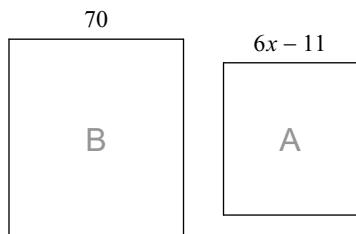


Geometry - Homework 31

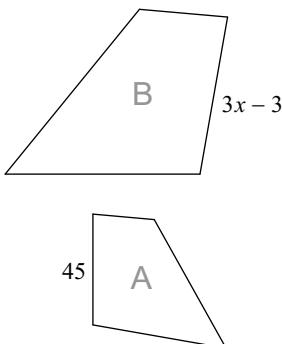
Solve for x . The polygons in each pair are similar.

1)



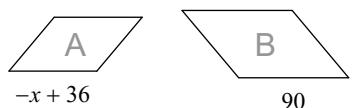
$$\text{scale factor from A to B} = 7 : 10$$

2)



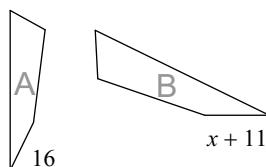
$$\text{scale factor from A to B} = 5 : 6$$

3)



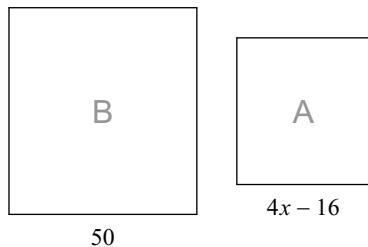
$$\text{scale factor from A to B} = 2 : 9$$

4)



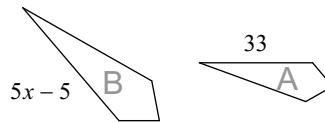
$$\text{scale factor from A to B} = 4 : 7$$

5)



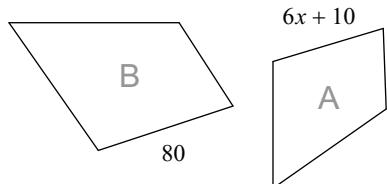
$$\text{scale factor from A to B} = 4 : 5$$

6)



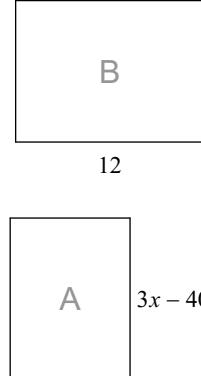
$$\text{scale factor from A to B} = 3 : 5$$

7)



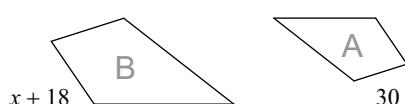
$$\text{scale factor from A to B} = 7 : 8$$

8)



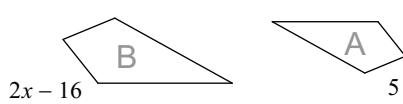
$$\text{scale factor from A to B} = 2 : 3$$

9)



$$\text{scale factor from A to B} = 5 : 6$$

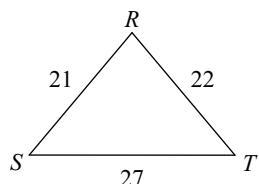
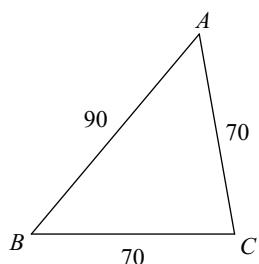
10)



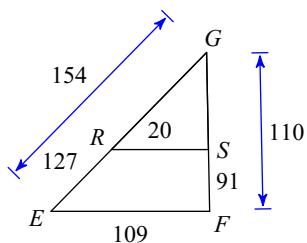
$$\text{scale factor from A to B} = 1 : 2$$

State if the triangles in each pair are similar.

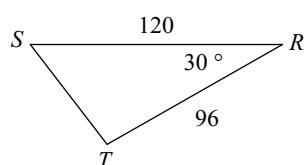
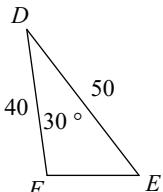
11) $\triangle ABC \sim \triangle TSR$



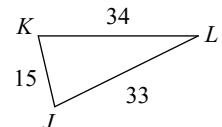
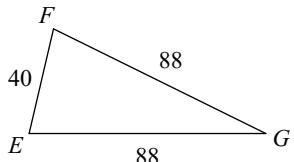
12)



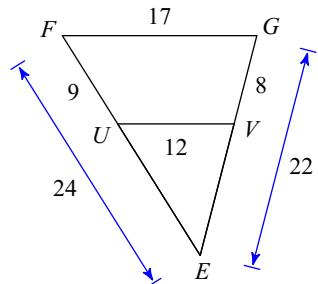
13) $\triangle RST \sim \triangle DEF$



14) $\triangle EFG \sim \triangle JKL$

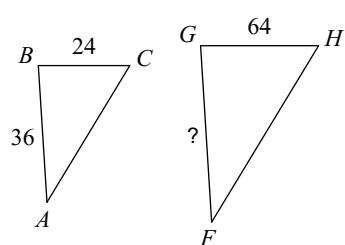


15)

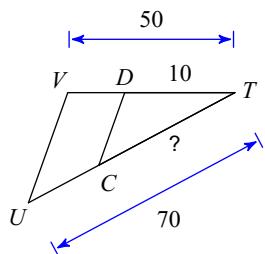


Find the missing length. The triangles in each pair are similar.

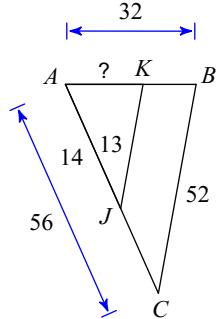
16) $\triangle FGH \sim \triangle ABC$



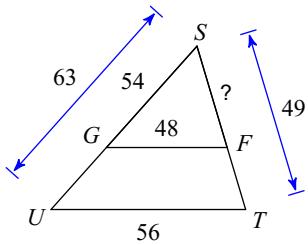
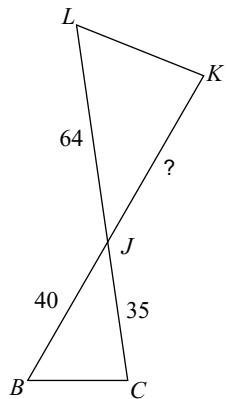
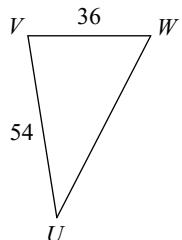
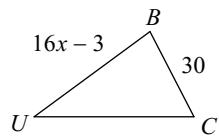
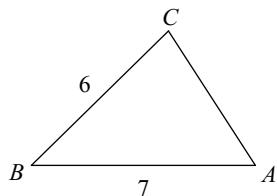
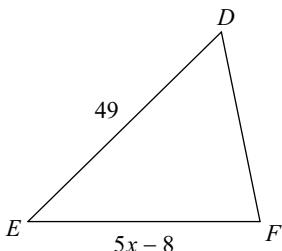
17)



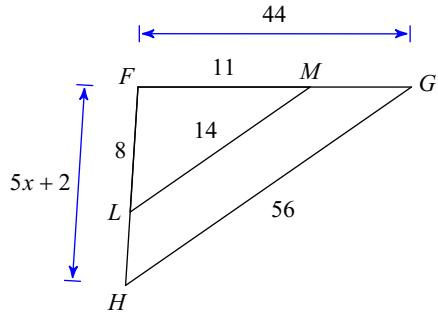
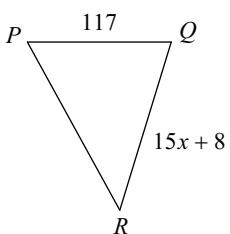
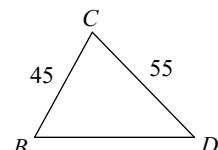
18)



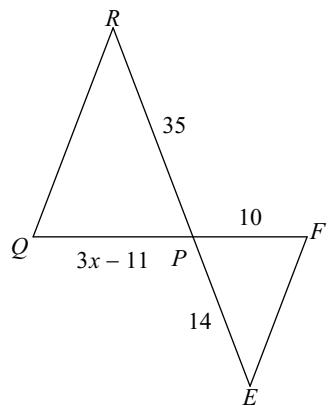
19)

20) $\triangle JKL \sim \triangle JCB$ **Solve for x . The triangles in each pair are similar.**21) $\triangle UVW \sim \triangle UBC$ 22) $\triangle DEF \sim \triangle ABC$ 

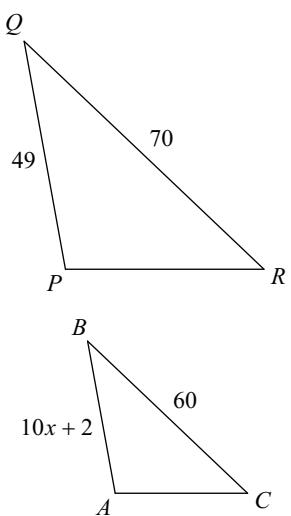
23)

24) $\triangle PQR \sim \triangle BCD$ 

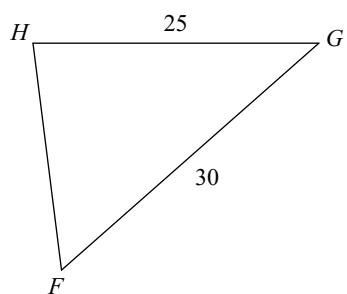
25) $\triangle PQR \sim \triangle PFE$



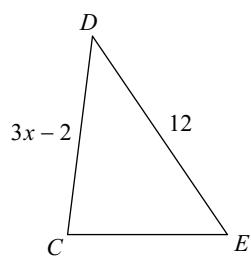
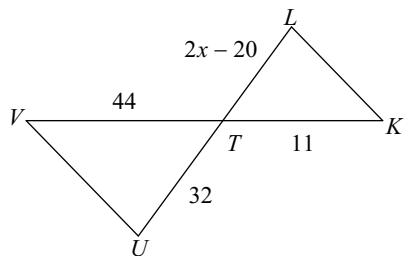
26) $\triangle PQR \sim \triangle ABC$



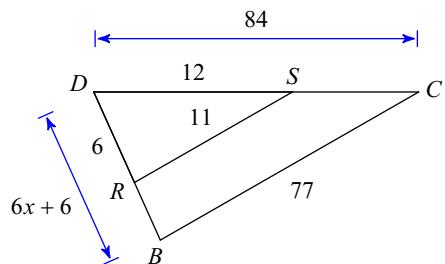
27) $\triangle HGF \sim \triangle CDE$



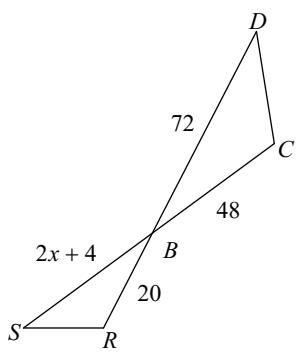
28) $\triangle TUV \sim \triangle TLK$



29)



30) $\triangle BCD \sim \triangle BRS$



Answers to Geometry - Homework 31

- | | | | |
|--------|-----------------|-------------|-----------------|
| 1) 10 | 3) 16 | 5) 14 | 7) 10 |
| 9) 18 | 11) not similar | 13) similar | 15) not similar |
| 17) 14 | 19) 42 | 21) 3 | 23) 6 |
| 25) 12 | 27) 4 | 29) 6 | |