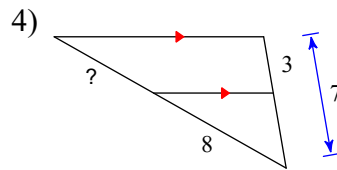
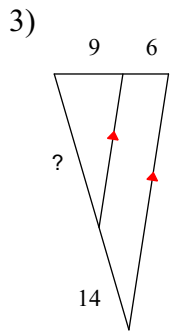
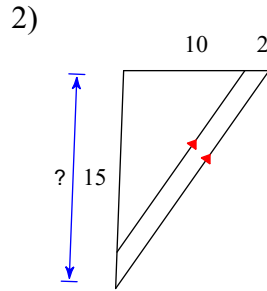
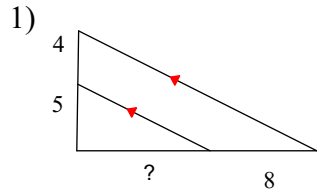
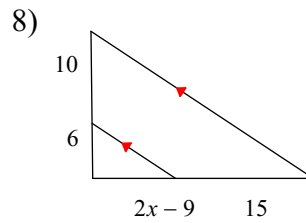
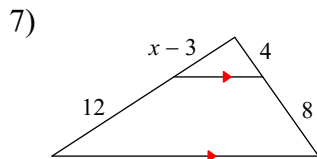
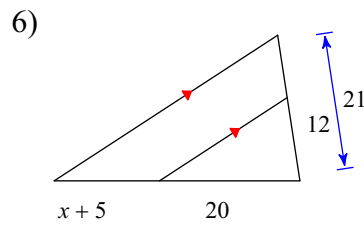
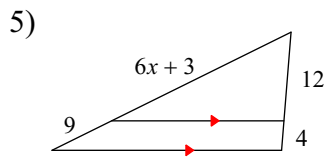


Unit 2 Test Review

Find the missing length indicated.

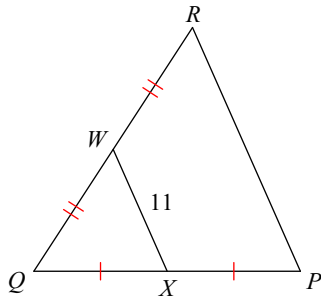


Solve for  $x$ .

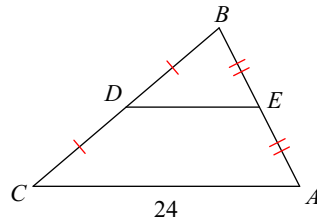


Find the missing length indicated.

9) Find  $PR$

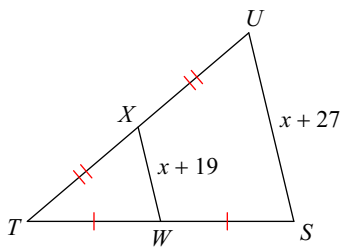


10) Find  $DE$

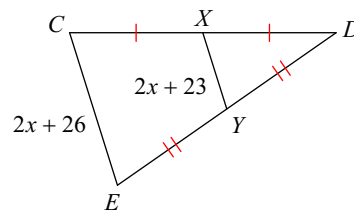


Solve for  $x$ .

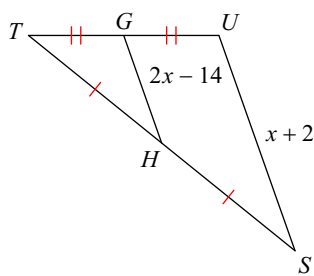
11)



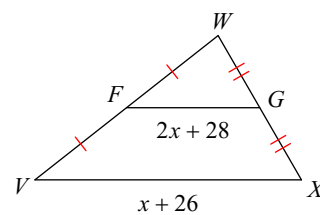
12)



13)

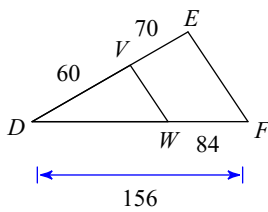


14)



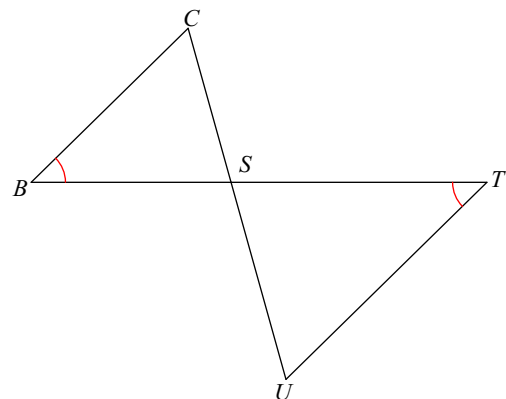
State if the triangles in each pair are similar. If so, state how you know they are similar and complete the similarity statement.

15)



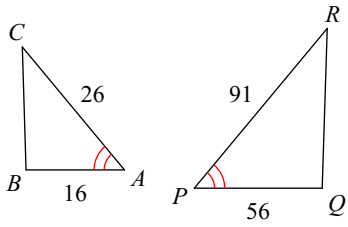
$\triangle DEF \sim$  \_\_\_\_\_

16)



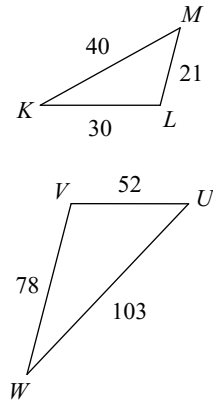
$\triangle STU \sim$  \_\_\_\_\_

17)



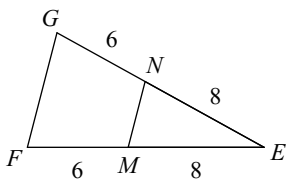
$\triangle PQR \sim$  \_\_\_\_\_

18)



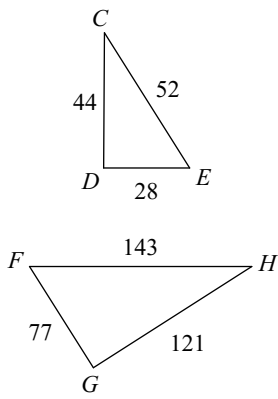
$\triangle UVW \sim$  \_\_\_\_\_

19)



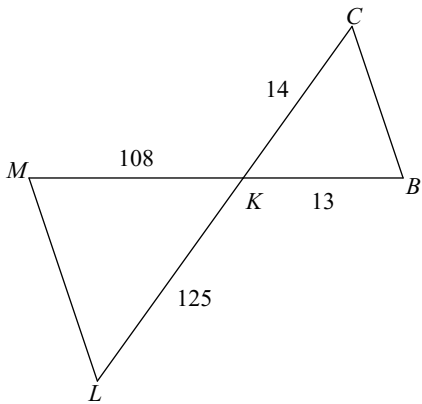
$\triangle EFG \sim$  \_\_\_\_\_

20)



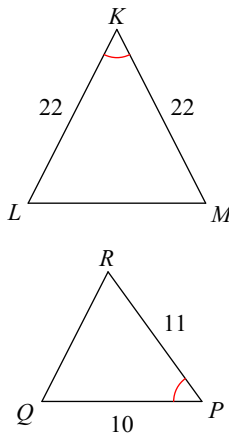
$\triangle FGH \sim$  \_\_\_\_\_

21)



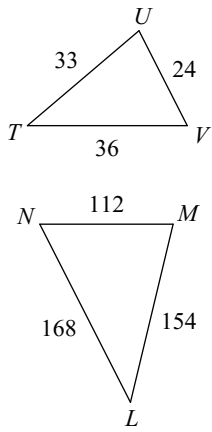
$\triangle KLM \sim$  \_\_\_\_\_

22)



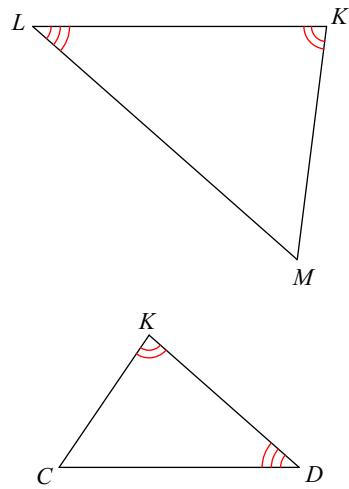
$\triangle KLM \sim$  \_\_\_\_\_

23)



$\triangle LMN \sim$  \_\_\_\_\_

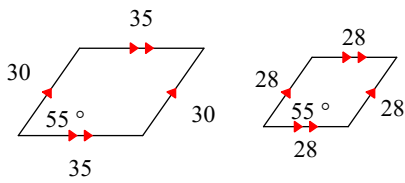
24)



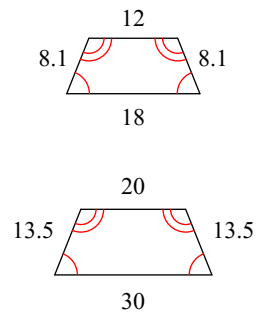
$\triangle KLM \sim$  \_\_\_\_\_

**State if the polygons are similar.**

25)

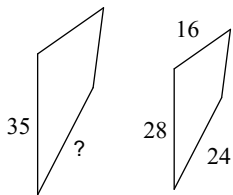


26)

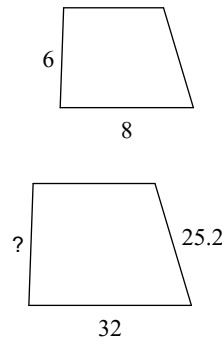


**The polygons in each pair are similar. Find the missing side length.**

27)

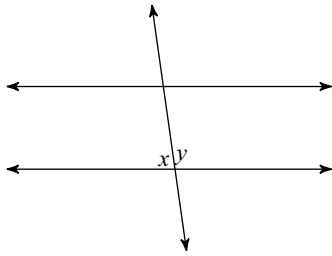


28)

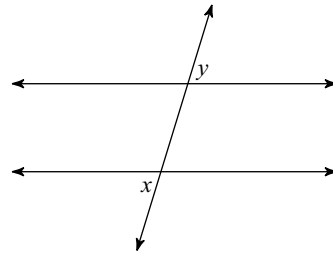


Identify each pair of angles as corresponding, alternate interior, alternate exterior, same-side interior, vertical, or linear pair.

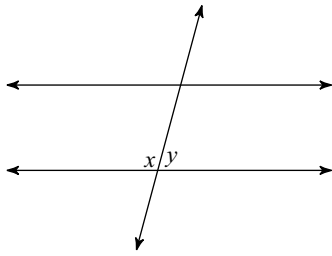
29)



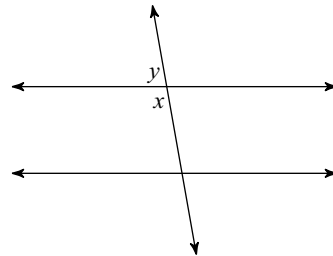
30)



31)

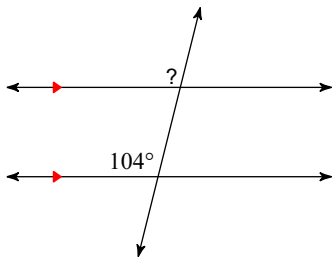


32)

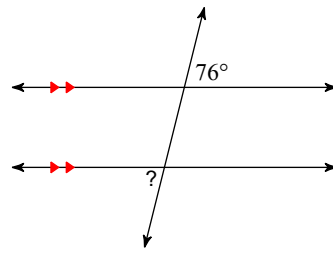


Find the measure of each angle indicated.

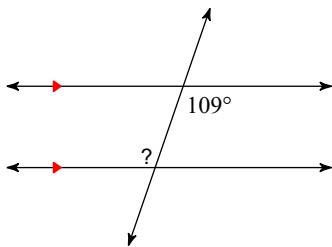
33)



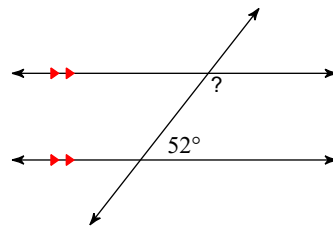
34)



35)

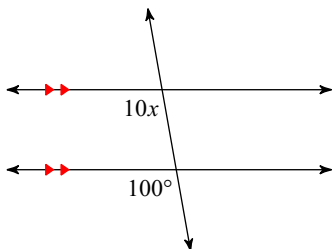


36)

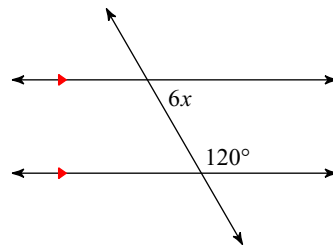


Solve for  $x$ .

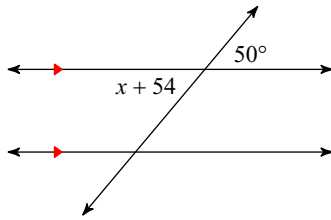
37)



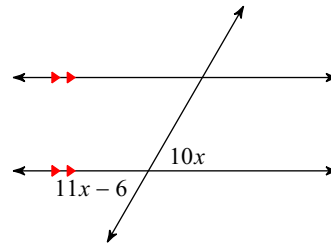
38)



39)



40)



41) A 150 ft building casts a shadow 100 feet long. What is length of the shadow of a 40 ft tree on the same day?

42) A 40 ft flagpole casts a 20 ft shadow. Find the shadow cast by a nearby building 150 feet tall. Round to the nearest tenth if necessary.

43) Triangles EFG and Triangle JKL are similar. The sides of triangle EFG are 30, 60, and 90. The shortest side of triangle JKL is 120. Find the length of the longest side. BONUS: Find the perimeter.

## Answers to Unit 2 Test Review (ID: 1)

- |  |  |  |                 |
|--|--|--|-----------------|
| 1) 10  | 2) 18  | 3) 21  | 4) 6            |
| 5) 4   | 6) 10  | 7) 9   | 8) 9            |
| 9) 22  | 10) 12                                       | 11) -11                                      | 12) -10         |
| 13) 10                                       | 14) -10                                      | 15) similar; SAS similarity; $\triangle DVW$ |                 |
| 16) similar; AA similarity; $\triangle SBC$  |  | 17) similar; SAS similarity; $\triangle ABC$ |                 |
| 18) not similar                              | 19) similar; SAS similarity; $\triangle EMN$ |  |                 |
| 20) similar; SSS similarity; $\triangle EDC$ |  | 21) not similar                              | 22) not similar |
| 23) similar; SSS similarity; $\triangle TUV$ |  | 24) similar; AA similarity; $\triangle KDC$  |                 |
| 25) not similar                              | 26) similar                                  | 27) 30                                       | 28) 24          |
| 29) adjacent                                 | 30) alternate exterior                       | 31) adjacent                                 | 32) adjacent    |
| 33) $104^\circ$                              | 34) $76^\circ$                               | 35) $109^\circ$                              | 36) $128^\circ$ |
| 37) 10                                       | 38) 10                                       | 39) -4                                       | 40) 6           |
| 41)  | 42)  | 43)  |                 |