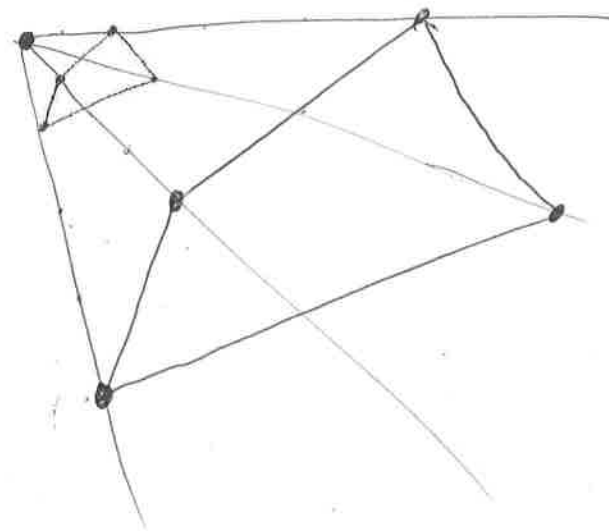
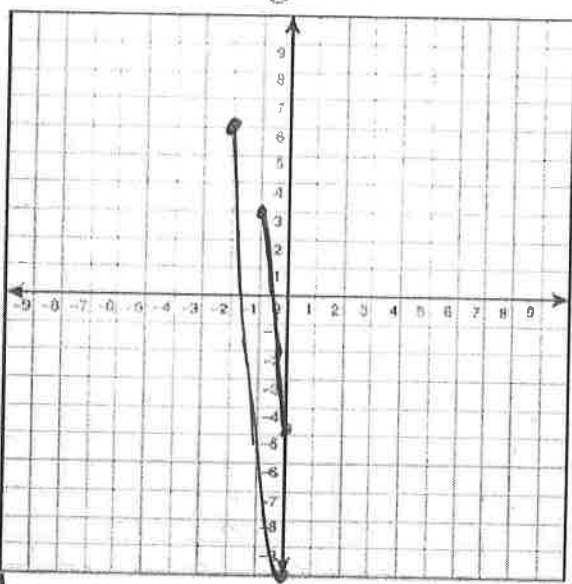


Key

Review - Chapter 8 (Similar Figures)

8.1

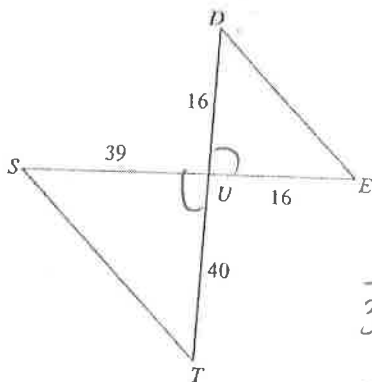
1. What is a dilation? expansion? contraction? scale factor?
2. original points: $(-2, 6)$ $(0, 10)$
 $n = \frac{1}{2}$ graph both segments
3. use the center of dilation and $n = 4$ to dilate the figure



8.2 & 8.3

Determine if the triangles are similar. If similar, write a similarity statement.

4.

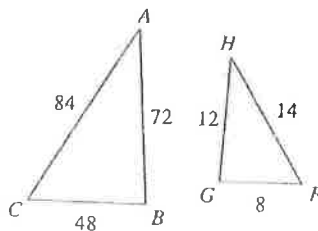


$$\frac{16}{39}$$

$$\frac{16}{40} = \frac{2}{5}$$

No

5.



$$\frac{14}{84} = \frac{1}{6}$$

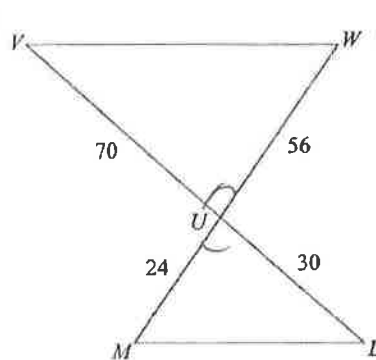
$$\frac{12}{72} = \frac{1}{6}$$

$$\frac{8}{48} = \frac{1}{6}$$

yes
SSS

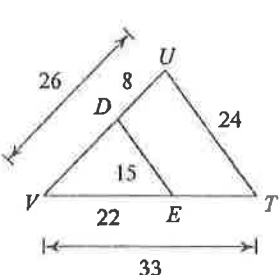
Review Maze - Chapter 8

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

1)  **yes, SAS**

$\frac{56}{24} = \frac{7}{3}$

$\frac{70}{30} = \frac{7}{3}$

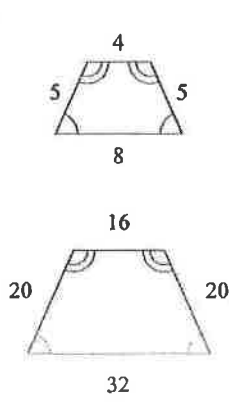
2)  **No**

$\frac{8}{26} = \frac{4}{13}$

$\frac{15}{24} = \frac{5}{8}$

$\frac{22}{33} = \frac{2}{3}$

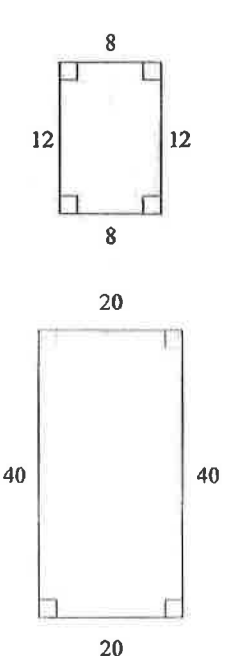
State if the polygons are similar.

3)  **yes**

$\frac{4}{16} = \frac{1}{4}$

$\frac{5}{20} = \frac{1}{4}$

$\frac{8}{32} = \frac{1}{4}$

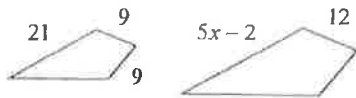
4)  **No**

$\frac{8}{20} = \frac{2}{5}$

$\frac{12}{40} = \frac{3}{10}$

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

5)



$$\frac{21}{5x-2} = \frac{9}{12}$$

$$252 = 9(5x-2)$$

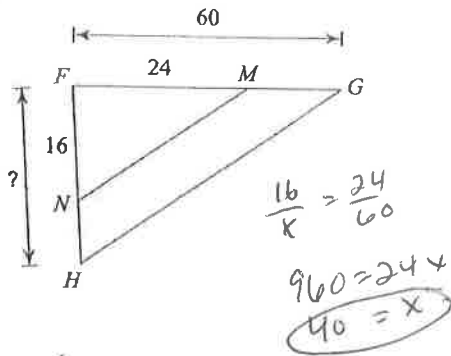
$$252 = 45x - 18$$

$$270 = 45x$$

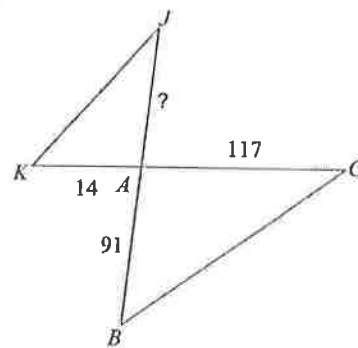
$$6 = x$$

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

6)



7)



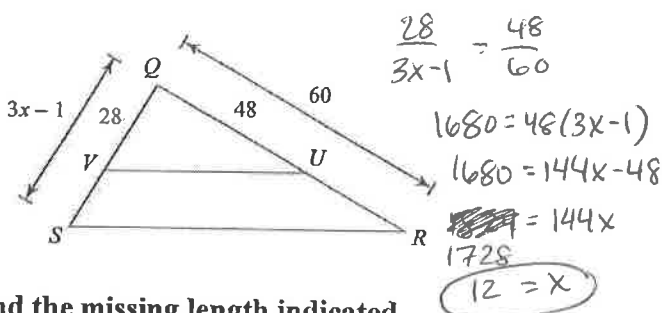
$$\frac{117}{x} = \frac{91}{14}$$

$$91x = 1638$$

$$x = 18$$

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

8)



$$\frac{28}{3x-1} = \frac{48}{60}$$

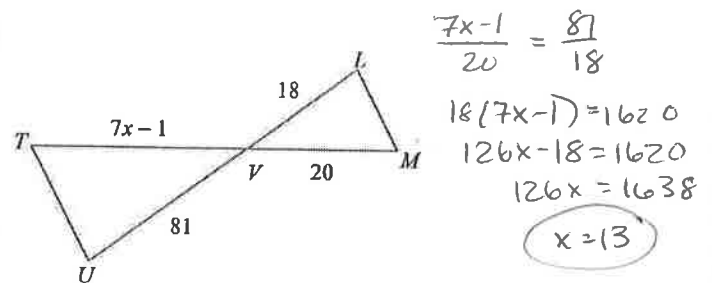
$$1680 = 48(3x-1)$$

$$1680 = 144x - 48$$

$$1728 = 144x$$

$$12 = x$$

9)



$$\frac{7x-1}{20} = \frac{81}{18}$$

$$18(7x-1) = 1620$$

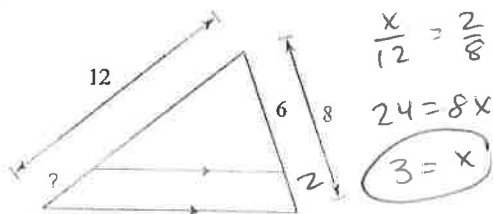
$$126x - 18 = 1620$$

$$126x = 1638$$

$$x = 13$$

Find the missing length indicated.

10)

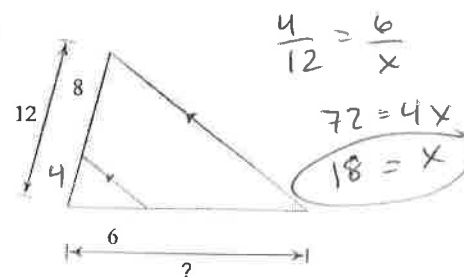


$$\frac{x}{12} = \frac{2}{6}$$

$$24 = 8x$$

$$3 = x$$

11)

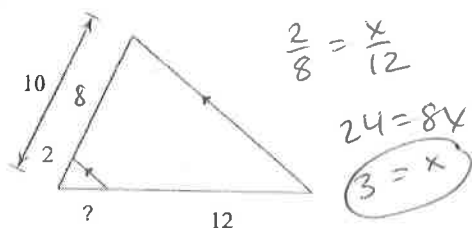


$$\frac{4}{12} = \frac{6}{x}$$

$$72 = 4x$$

$$18 = x$$

12)

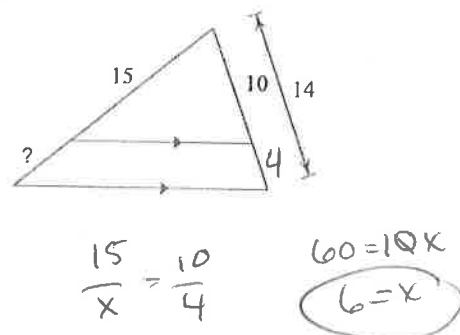


$$\frac{2}{8} = \frac{x}{12}$$

$$24 = 8x$$

$$3 = x$$

13)

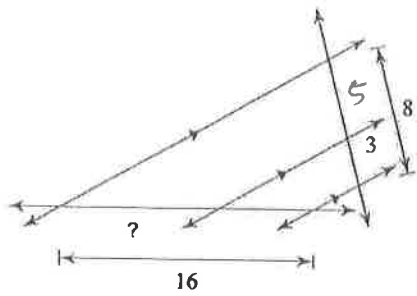


$$\frac{15}{x} = \frac{10}{4}$$

$$60 = 10x$$

$$6 = x$$

14)

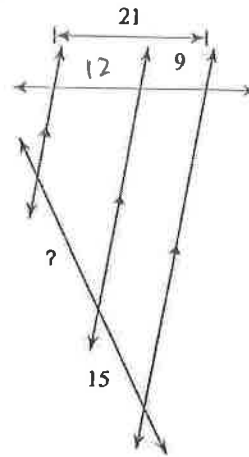


$$\frac{x}{16} = \frac{5}{8}$$

$$8x = 80$$

$$x = 10$$

15)

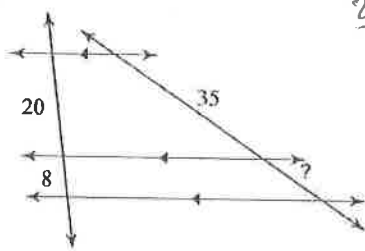


$$\frac{12}{9} = \frac{x}{15}$$

$$180 = 9x$$

$$20 = x$$

16)

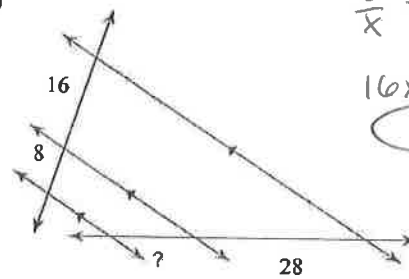


$$\frac{20}{8} = \frac{35}{x}$$

$$20x = 280$$

$$x = 14$$

17)

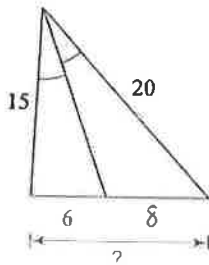


$$\frac{8}{x} = \frac{16}{28}$$

$$16x = 224$$

$$x = 14$$

18)



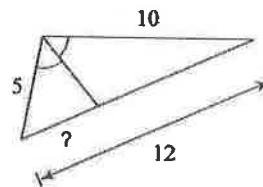
$$\frac{15}{6} = \frac{20}{y}$$

$$15y = 120$$

$$y = 8$$

$$6 + 8 = 14 = x$$

19)



$$\frac{5}{x} = \frac{10}{12-x}$$

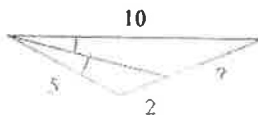
$$5(12-x) = 10x$$

$$60 - 5x = 10x$$

$$60 = 15x$$

$$4 = x$$

20)

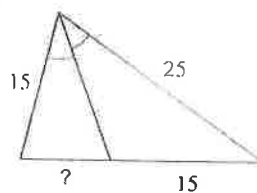


$$\frac{5}{2} = \frac{10}{x}$$

$$20 = 5x$$

$$4 = x$$

21)



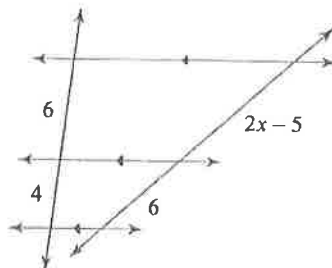
$$\frac{15}{x} = \frac{25}{15}$$

$$225 = 25x$$

$$9 = x$$

Solve for x.

22)



$$\frac{6}{4} = \frac{2x-5}{6}$$

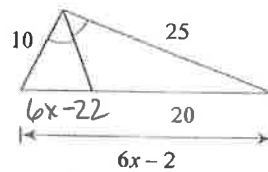
$$36 = 4(2x-5)$$

$$36 = 8x - 20$$

$$56 = 8x$$

$$7 = x$$

23)



$$\frac{10}{6x-22} = \frac{25}{20}$$

$$200 = 25(6x-22)$$

$$200 = 150x - 550$$

$$750 = 150x$$

$$5 = x$$

OR

$$\frac{10}{x} = \frac{25}{20}$$

$$200 = 25x$$

$$8 = x$$

$$6x - 22 = 28$$

$$6x = 30$$

$$x = 5$$