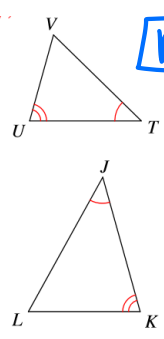
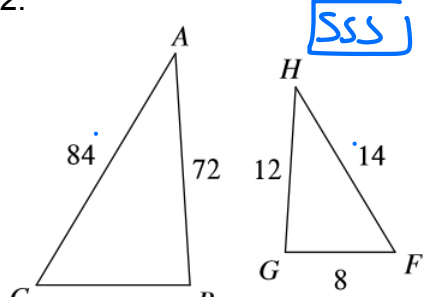
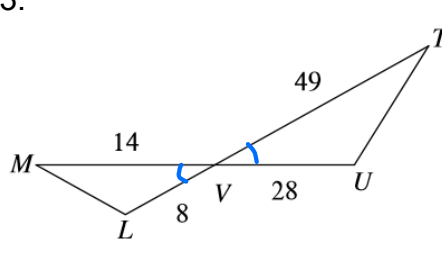


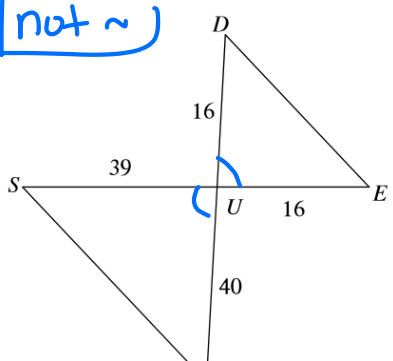
Use the given information below to determine which similarity statement can be used to show that the triangles are similar. (AA, SAS, SSS)

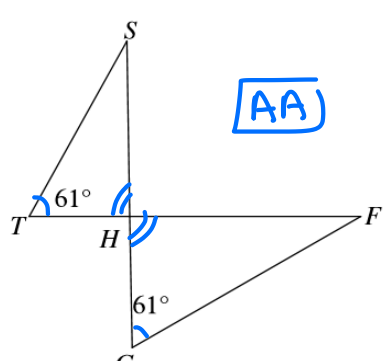
1.  **AA**

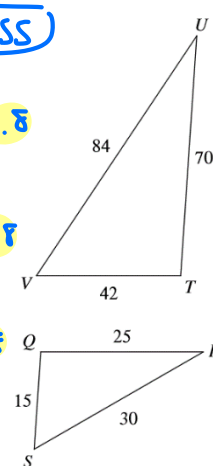
2.  **SSS**

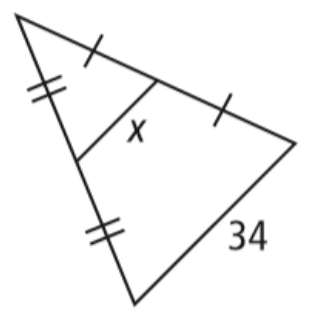
$\frac{84}{12} = 7$ $\frac{72}{14} = \frac{36}{7}$ $\frac{48}{8} = 6$

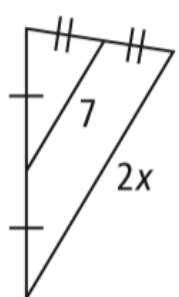
3.  $\frac{49}{14} = 3.5$ $\frac{28}{8} = 3.5$

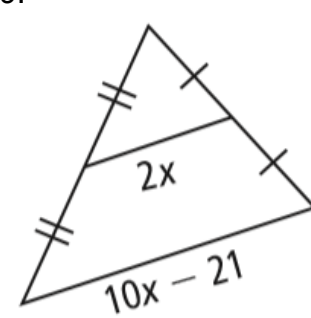
4. **not ~**  $\frac{39}{16} = 2.4375$ $\frac{40}{16} = 2.5$

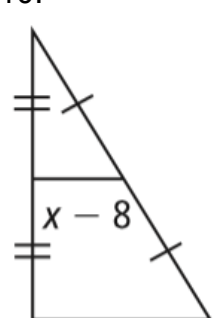
5.  **AA**

6. **SSS**  $\frac{84}{28} = 3$ $\frac{70}{25} = 2.8$ $\frac{42}{15} = 2.8$

7. Find x.  **x=17**

8. Find x.  $2(_) = 2x$
 $\frac{14}{2} = \frac{2x}{2}$
x=2

9.  $2(2x) = 10x - 21$
 $4x = 10x - 21$
 $-10x \quad -10x$
 $-6x = -21$
 $\frac{-6x}{-6} = \frac{-21}{-6}$
x=3.5

10.  $2(x-8) = 35$
 $2x - 16 = 35$
 $\quad \quad +16 \quad +16$
 $2x = 51$
 $\frac{2x}{2} = \frac{51}{2}$
x=25.5

Find the value of x in each pair of similar figures.

11.

$$\frac{x}{25.2} = \frac{14}{29.4}$$

$$x = 12$$

12.

$$\frac{x}{14} = \frac{14}{28}$$

$$x = 7$$

13. At a certain time of day, a tree that is 12 feet tall casts a shadow that is 8 feet long. Find the length of the shadow that is created by a 10-foot-tall basketball hoop at the same time of day.

$$\frac{x}{8} = \frac{10}{12}$$

$$x = 6.\bar{6}$$

14. Sheila is standing near the Eiffel Tower in Paris, France. The shadow of the monument is 580 feet long, and Sheila's shadow is 3 feet long. If Sheila is 5 feet 6 inches tall, how tall is the monument?

$$\frac{x}{5.5} = \frac{580}{3}$$

$$x = 1063.\bar{3}$$

15. Find the value of x.

$$\frac{x}{5} = \frac{7}{x}$$

$$\sqrt{x^2} = \sqrt{35}$$

$$x = 5.9$$

16. Find the value of x.

$$\frac{\sqrt{6}}{3} = \frac{x}{\sqrt{6}}$$

$$\frac{6}{3} = \frac{3x}{3}$$

$$x = 2$$

17. Solve for x.

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

$$x = 5.4$$

18. Solve for MV.

$$\frac{x}{35} = \frac{8}{14}$$

$$x = 20$$

19. Solve for (?).

$$\frac{x}{15} = \frac{8}{6}$$

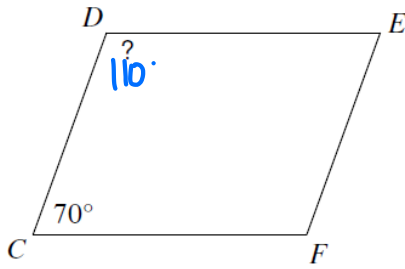
$$x = 20$$

20. Solve for (?).

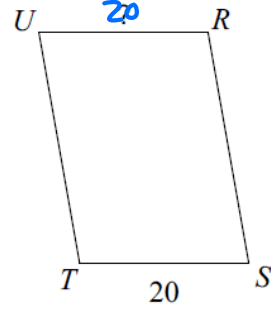
$$\frac{x}{8} = \frac{6}{12}$$

$$x = 4$$

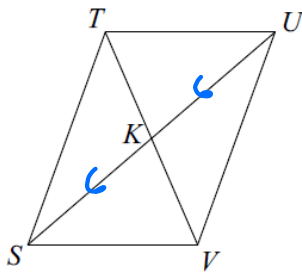
1. Find all the missing angles.



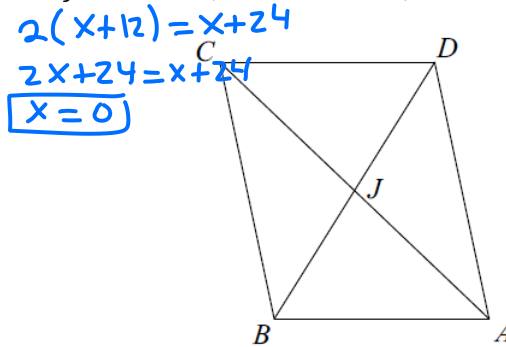
2. Find the missing side.



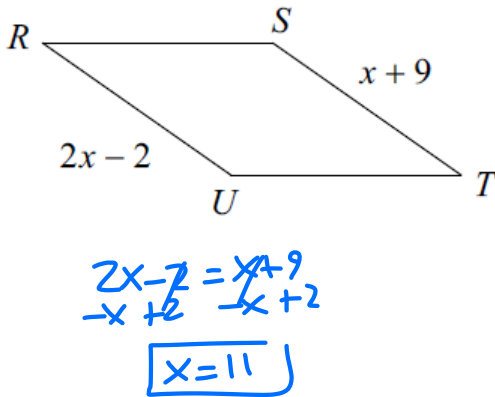
3. $TK = 6$, find KV.



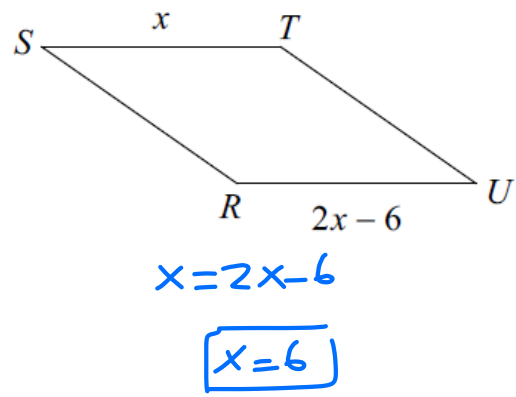
4. $BJ = x + 12$, $BD = x + 24$, Find BJ.



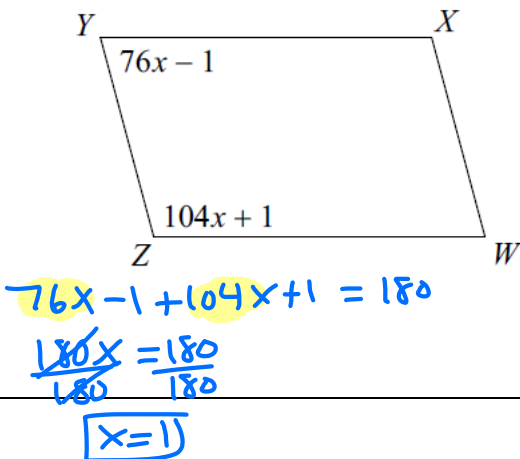
5. Solve for x.



6. Solve for x.



7. Solve for x.



8. Find $\angle E$.

