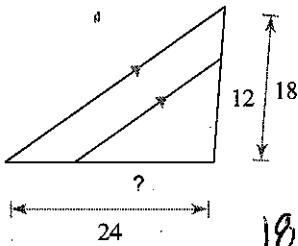


Assignment

Find the missing length indicated. *proportional sides*

1)

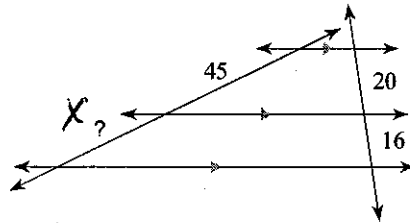


$$\frac{12}{18} = \frac{x}{24}$$

$$18x = 288$$

$$\boxed{x = 16}$$

2)



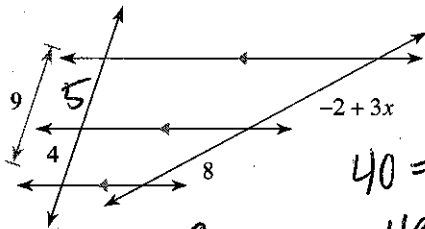
$$\frac{x}{45} = \frac{16}{20}$$

$$20x = 720$$

$$\boxed{x = 36}$$

Solve for x.

3)



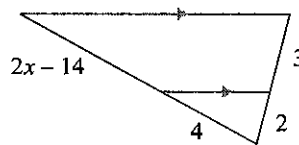
$$\frac{4}{9} = \frac{-2+3x}{8}$$

$$40 = -8 + 12x$$

$$48 = 12x$$

$$\boxed{x = 4}$$

4)



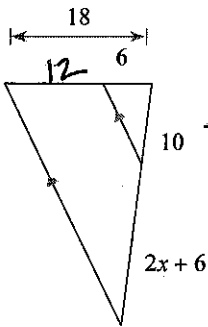
$$\frac{2x-14}{4} = \frac{2}{3}$$

$$4x - 28 = 12$$

$$4x = 40$$

$$\boxed{x = 10}$$

5)



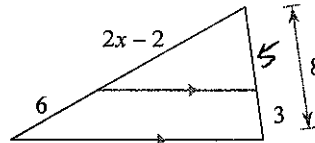
$$\frac{6}{12} = \frac{10}{2x+6}$$

$$120 = 12x + 30$$

$$26 = 2x$$

$$\boxed{x = 13}$$

6)



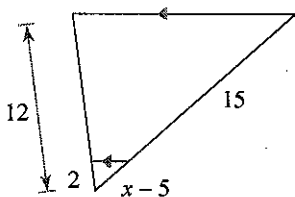
$$\frac{6}{2x-2} = \frac{3}{5}$$

$$30 = 6x - 6$$

$$36 = 6x$$

$$\boxed{x = 6}$$

7)



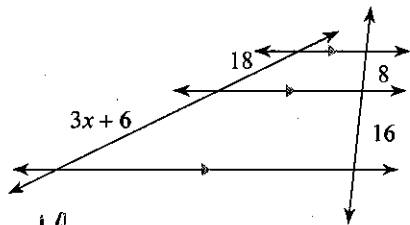
$$\frac{2}{12} = \frac{x-5}{x-5+15}$$

$$12x - 60 = 2x + 20$$

$$10x = 80$$

$$\boxed{x = 8}$$

8)



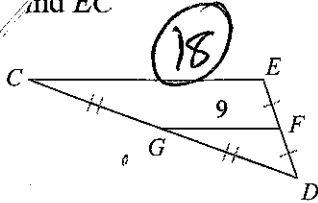
$$\frac{18}{3x+6} = \frac{8}{16}$$

$$\boxed{x = 10}$$

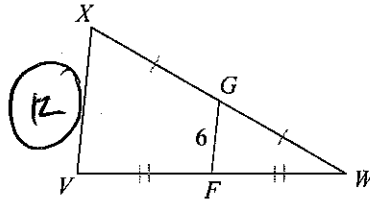
-1- $24x + 48 = 288$

missing length indicated. (Midsegments)

mid EC

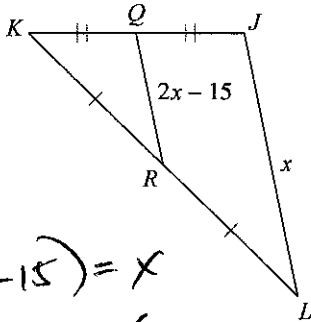


10) Find XV



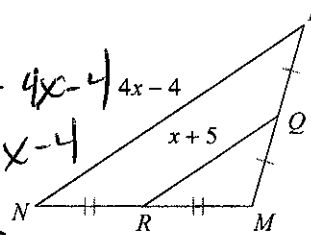
Solve for x.

11)



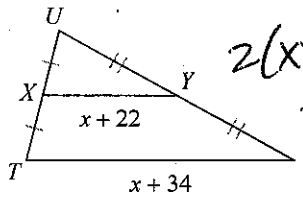
$$\begin{aligned} 2(2x-15) &= x \\ 4x-30 &= x \\ -30 &= -3x \\ \boxed{x=10} \end{aligned}$$

12)



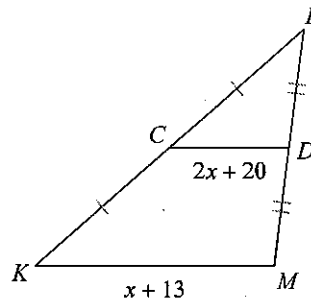
$$\begin{aligned} 2(x+5) &= 4x-4 \\ 2x+10 &= 4x-4 \\ 14 &= 2x \\ \boxed{x=7} \end{aligned}$$

13)



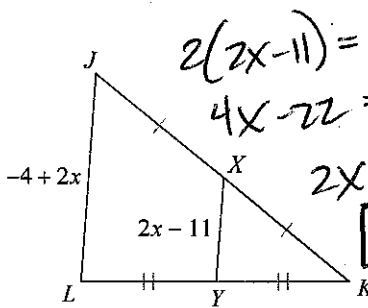
$$\begin{aligned} 2(x+22) &= x+34 \\ 2x+44 &= x+34 \\ \boxed{x=-10} \end{aligned}$$

14)



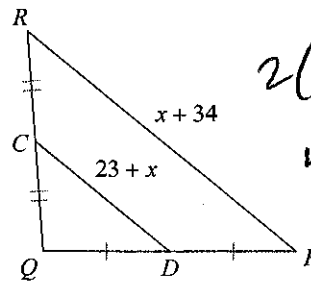
$$\begin{aligned} 2(2x+20) &= x+13 \\ 4x+40 &= x+13 \\ 3x &= -27 \\ \boxed{x=-9} \end{aligned}$$

15)



$$\begin{aligned} 2(2x-11) &= -4+2x \\ 4x-22 &= -4+2x \\ 2x &= 18 \\ \boxed{x=9} \end{aligned}$$

16)



$$\begin{aligned} 2(23+x) &= x+34 \\ 46+2x &= x+34 \\ \boxed{x=-12} \end{aligned}$$