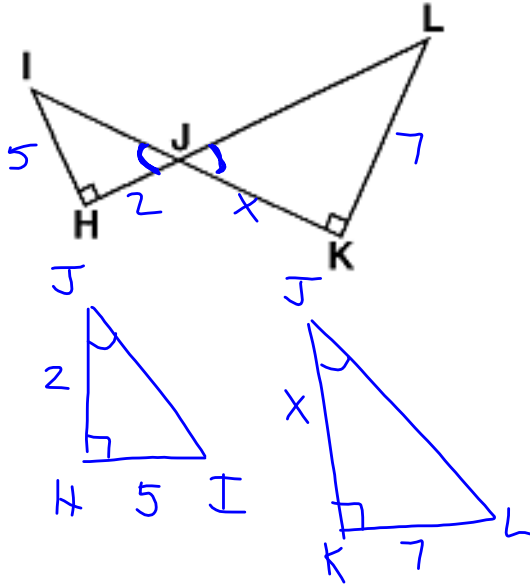


DO NOW

In the accompanying diagram, $\triangle IHJ \sim \triangle LKJ$.

If $IH = 5$, $HJ = 2$, and $LK = 7$, find \overline{KJ} .



$$\frac{2}{5} = \frac{x}{7}$$

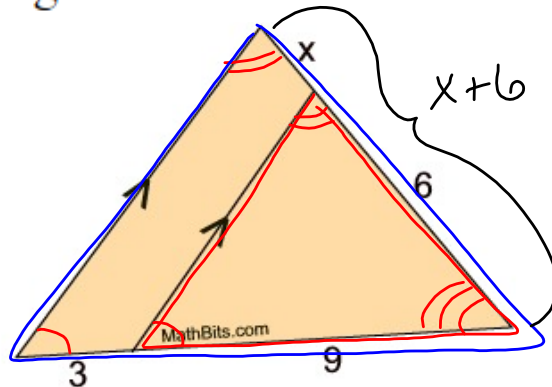
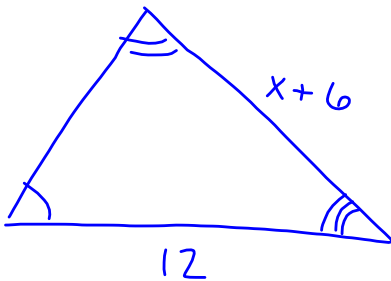
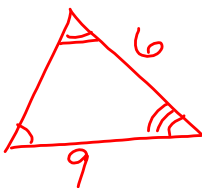
$$5x = 14$$

$$x = 2.8$$

$$\boxed{KJ = 2.8}$$

Feb 18-12:08 PM

Given the diagram at the right as labeled. Find x .



$$\frac{6}{9} = \frac{x+6}{12}$$

$$9x + 54 = 72$$

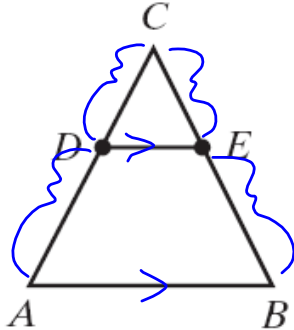
$$9x = 18$$

$$\boxed{x = 2}$$

Jan 4-9:38 AM

Side Splitter Theorem

If a line is parallel to a side of a triangle and intersects the other two sides, then this line divides those two sides proportionally.



If $\overline{DE} \parallel \overline{AB}$, then $\frac{CD}{DA} = \frac{CE}{EB}$

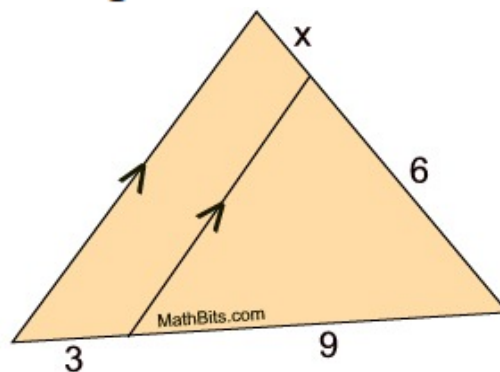
Feb 28-10:18 AM

Given the diagram at the right as labeled. Find x .

$$\frac{6}{x} = \frac{9}{3}$$

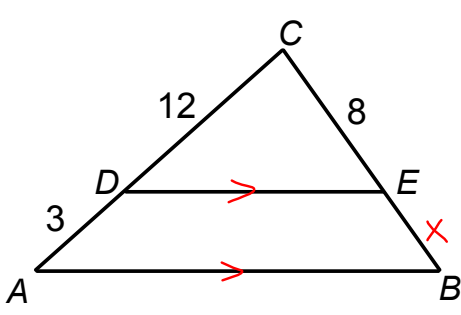
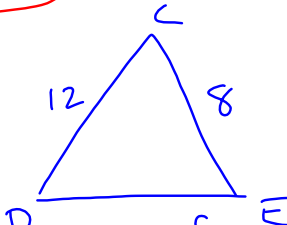
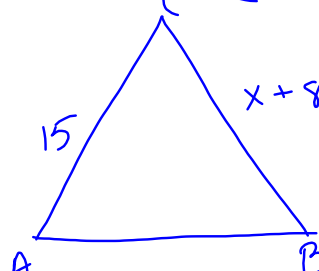
$$9x = 18$$

$$x = 2$$



Jan 4-9:38 AM

In $\triangle ABC$, $DE \parallel AB$. Find EB.

$$\frac{3}{12} = \frac{x}{8}$$

$$12x = 24$$

$$x = 2$$

$$\frac{12}{15} = \frac{8}{x+8}$$

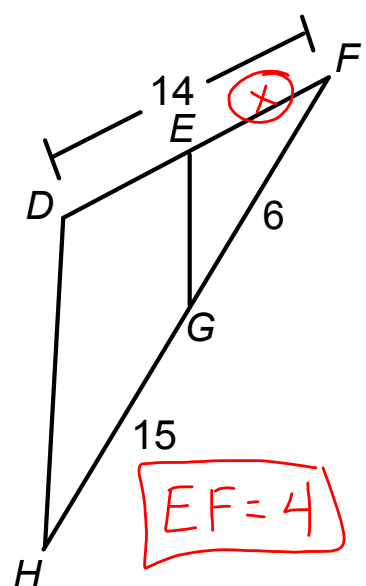
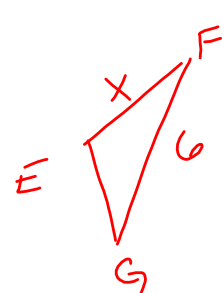
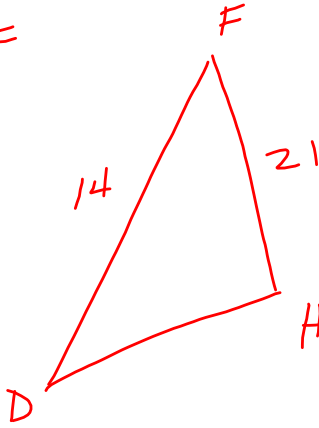
$$12x + 96 = 120$$

$$12x = 24$$

$$x = 2$$

Feb 28-10:07 AM

In $\triangle DFH$, $EG \parallel DH$. Find EF.

$$\frac{x}{14} = \frac{6}{21}$$

$$21x = 84$$

$$x = 4$$

$EF = 4$

Feb 28-11:20 AM

Find DE.

$\frac{8}{x} = \frac{24}{18}$

$24x = 144$

$x = 6$

Feb 28-10:14 AM