

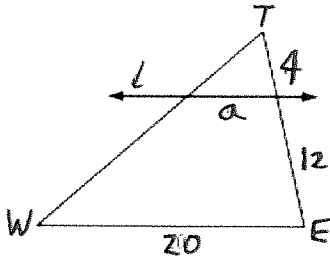
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Sheet 761: Triangle Proportionality Theorem Practice "Side Splitter Theorem"

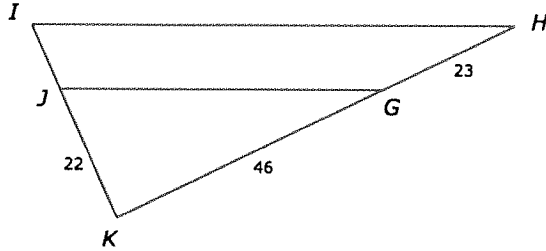
Version 1.1

A line parallel to a side of a triangle divides the other sides proportionally.

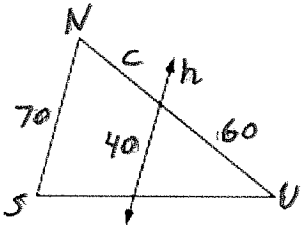
1. $\ell \parallel \overline{WE}$
 $a = ?$ (h)



2. $\overline{HI} \parallel \overline{GJ}$. Find D .

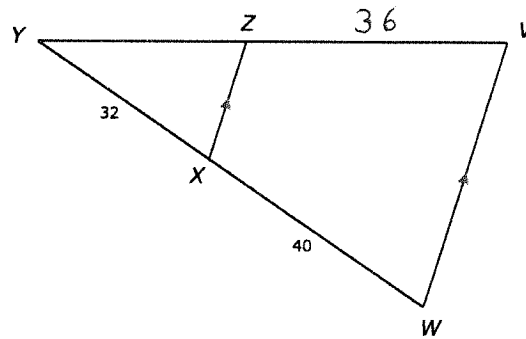


3. $n \parallel \overline{SV}$
 $c = ?$ (h)

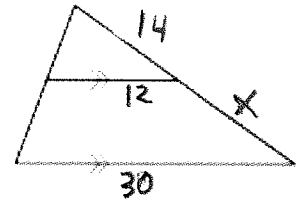


- 4.

Find YZ .



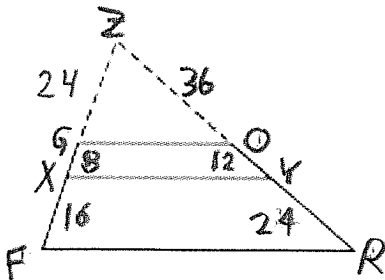
7. Alex and José have each found the value of x in the diagram at right in different ways and are explaining their methods. Alex says, "The proportion I used to solve this problem is $\frac{x-30}{14} = \frac{30}{12}$ so x is 35." José looks puzzled and responds, "I got x is 21 by using the proportion $\frac{x+14}{30} = \frac{14}{12}$." Explain which method is correct and what is wrong with the incorrect method.



$$\frac{x-30}{14} = \frac{30}{12}$$

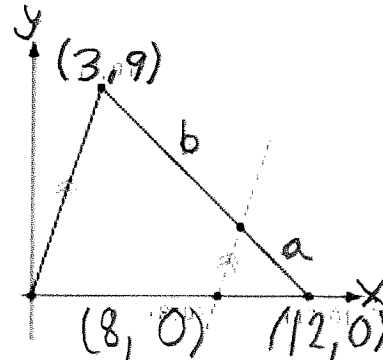
$$\frac{x+14}{30} = \frac{14}{12}$$

12. Is $\overline{XY} \parallel \overline{GO}$?
 Is $\overline{XY} \parallel \overline{FR}$?
 Is $FROG$ a trapezoid?



$\overline{WX} \parallel \overline{VY}$. Find VW .

13. $a = ?$, $b = ?$ (h)



Question 6².

