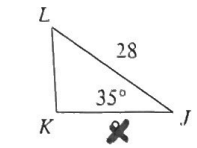
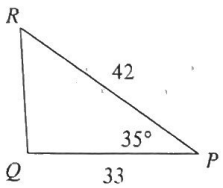
Extra Practice Key

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

13)



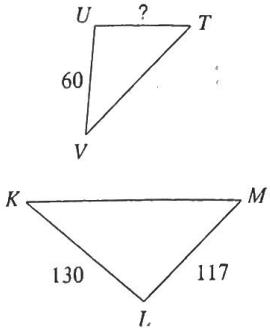


$\frac{28}{x} = \frac{42}{33}$

$\frac{42x}{42} = \frac{924}{42}$

$KJ = 22$

14)

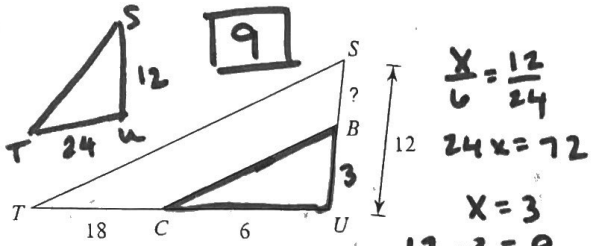


$\frac{60}{130} = \frac{x}{117}$

$\frac{130x}{130} = \frac{7020}{130}$

$x = 54$

15)



9

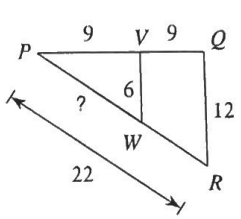
$\frac{x}{6} = \frac{12}{24}$

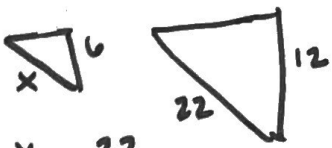
$24x = 72$

$x = 3$

$12 - 3 = 9$

16)





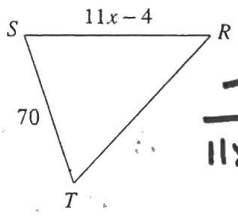
$\frac{x}{6} = \frac{22}{12}$

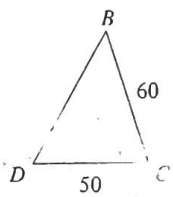
$\frac{12x}{12} = \frac{132}{12}$

$x = 11$

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

17)





$\frac{70}{11x-4} = \frac{50}{60}$

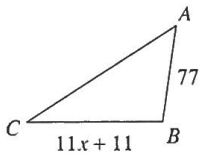
$4200 = 550x - 200$

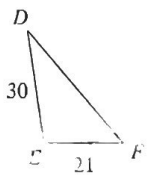
$+200 \quad +200$

$4400 = 550x$

$x = 8$

18)





$\frac{21}{77} = \frac{30}{11x+11}$

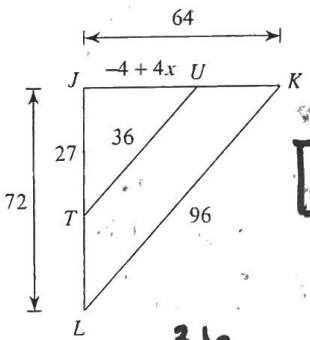
$2310 = 231x + 231$

$-231 \quad -231$

$\frac{2079}{231} = \frac{231x}{231}$

$x = 9$

19)



$x = 7$

$\frac{36}{-4+4x} = \frac{96}{64}$

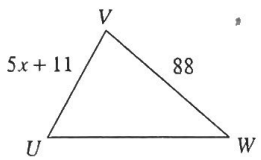
$2304 = -384 + 384x$

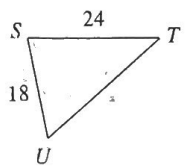
$+384 \quad +384$

$2688 = 384x$

$x = 7$

20)





$\frac{18}{24} = \frac{5x+11}{88}$

$1584 = 120x + 264$

$-264 \quad -264$

$\frac{1320}{120} = \frac{120x}{120}$

$x = 11$