

Solve a problem involving similar triangles.

1. Solve for x , if $\triangle KLM \sim \triangle WVU$
 $KL = 40$, $KM = 35$, $VW = 16$, $UV = 2x - 4$
2. Solve for x , if $\triangle QRS \sim \triangle QGF$
 $QR = 18$, $RS = 20$, $QS = x + 1$, $QG = 9$, $GF = 5$, $GF = 10$
3. Solve for x , if $\triangle RST \sim \triangle RLM$
 $RT = 35$, $RS = 16x + 3$, $RM = 21$, $RL = 21$
4. Solve for x , if $\triangle ABC \sim \triangle RQP$
 $AB = 63$, $AC = 90$, $RP = 40$, $RQ = 9x + 1$
5. Solve for x , if $\triangle LMN \sim \triangle LVW$
 $LN = 13x + 1$, $LM = 45$, $LV = 36$, $LW = 32$
6. Solve for x , if $\triangle EFG \sim \triangle PQR$
 $PR = 7$, $PQ = 8$, $EG = 28$, $EF = 4x$
7. Solve for x , if $\triangle DEF \sim \triangle RST$
 $DE = 18$, $EF = 14$, $ST = 7$, $RS = x + 4$
8. Solve for x , if $\triangle EFG \sim \triangle ETU$
 $EF = 25$, $EG = 50$, $ET = 5$, $EU = 2x - 6$
9. Solve for x , if $\triangle LKM \sim \triangle GHM$
 $KL = 36$, $LM = 6x + 9$, $KM = 27$, $GH = 4$, $HM = 3$, $GM = 5$
10. Solve for x , if $\triangle KLM \sim \triangle KTS$
 $KL = 48$, $KM = 72$, $KS = 9$, $KT = x + 2$
11. Solve for x , if $\triangle TSR \sim \triangle TKL$
 $ST = 30$, $RT = 24$, $LT = 8$, $KT = 3x - 5$
12. Solve for x , if $\triangle JKL \sim \triangle UVW$
 $JL = 20$, $JK = 6x - 2$, $UV = 10$, $UV = 5$