

Step 1: Create fractions using the order of the similarity statement.

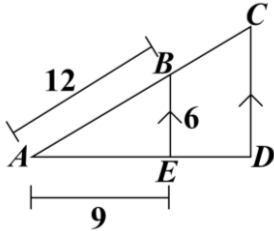
Step 2: Substitute the sides you know.

Step 3: Set the fractions equal to each other or equal to the scale factor, if one is provided.

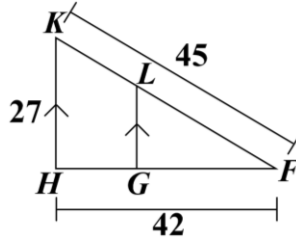
Step 4: Cross multiply & solve.

Step 5: Substitute the value of x , if needed.

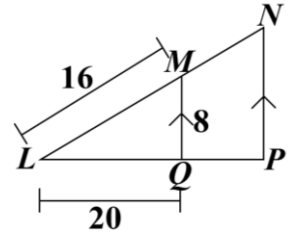
1. $\triangle ABE \sim \triangle ACD$, with a scale factor of $\frac{3}{4}$.
Determine the length of AC .



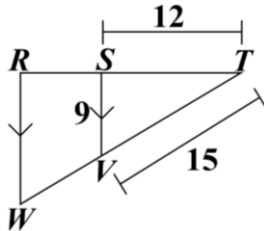
2. $\triangle FGL \sim \triangle FHK$, with a scale factor of $\frac{2}{3}$.
Determine the length of GL .



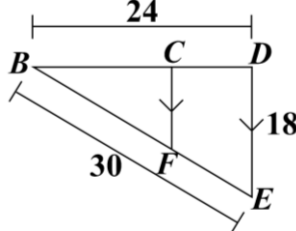
3. $\triangle LNP \sim \triangle LMQ$, with a scale factor of $\frac{7}{4}$.
Determine the length of LP .



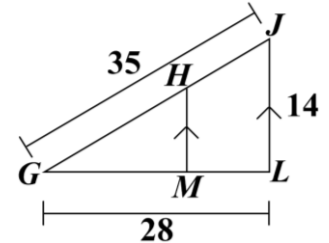
4. $\triangle STV \sim \triangle RTW$, with a scale factor of $\frac{3}{5}$.
Determine the length of RT .



5. $\triangle BDE \sim \triangle BCF$, with a scale factor of $\frac{6}{5}$.
Determine the length of CF .



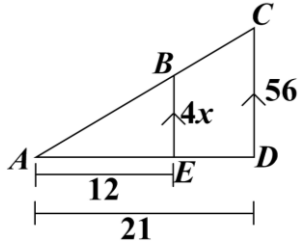
6. $\triangle GHM \sim \triangle GJL$, with a scale factor of $\frac{1}{7}$.
Determine the length of GH .



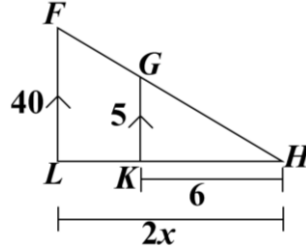
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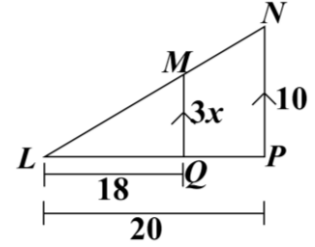
7. Determine the length of BE , given that $\triangle ABE \sim \triangle ACD$.



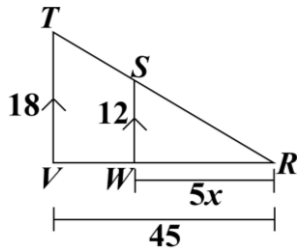
8. Determine the length of LH given that $\triangle GKH \sim \triangle FLH$.



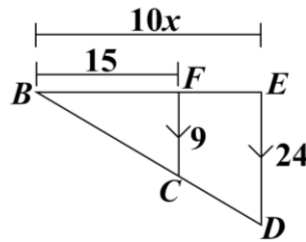
9. Determine the length of MQ , given that $\triangle LNP \sim \triangle LMQ$.



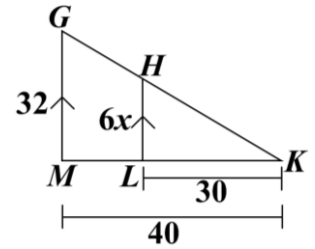
10. Determine the length of RW , given that $\triangle TRV \sim \triangle SRW$.



11. Determine the length of BE , given that $\triangle BFC \sim \triangle BED$.



12. Determine the length of HL , given that $\triangle HLK \sim \triangle GMK$.



Unit 4 Review - Similar Triangle Relationships Answers

1. $AC = 16$	2. $GL = 18$	3. $LP = 35$
4. $RT = 20$	5. $CF = 15$	6. $GH = 5$
7. $BE = 8$	8. $LH = 48$	9. $MQ = 9$
10. $RW = 30$	11. $BE = 40$	12. $HL = 24$