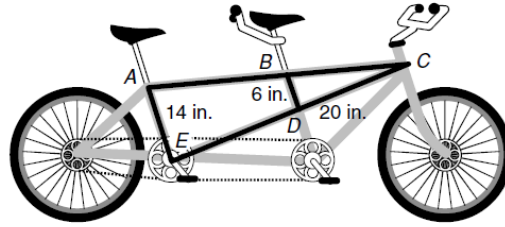


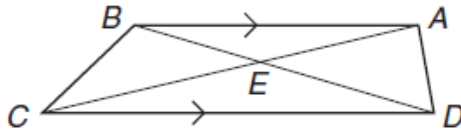
Worksheet: Proving Triangles are Similar (use a separate sheet of paper)

Given: AE is parallel to BD
 Prove: $\triangle CBD \sim \triangle CAE$.

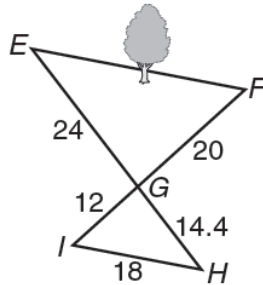


Given: $\overline{AB} \parallel \overline{DC}$

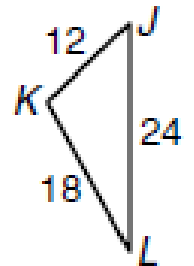
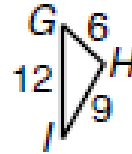
Prove: $\triangle AEB \sim \triangle CED$



Given: $10(GH) = 6(EG)$
 $10(IG) = 6(EG)$
 Prove: $\angle E \cong \angle H$

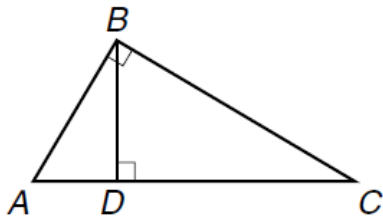


Given: $\triangle GHI$ and $\triangle JKL$
 Verify: $\triangle GHI \sim \triangle JKL$ in a paragraph proof



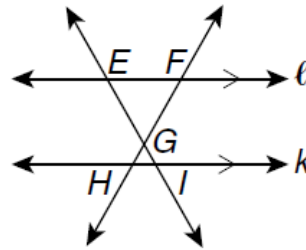
Given: right $\triangle ABC$; $\overline{BD} \perp \overline{AC}$

Prove: $\triangle ABC \sim \triangle ADB$



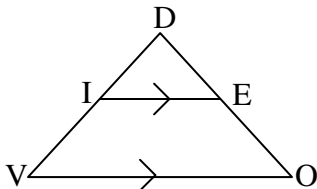
Given: $\ell \parallel k$

Prove: $\triangle EFG \sim \triangle IHG$



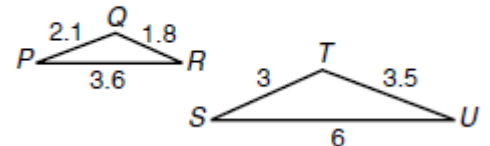
Given: IE is parallel to VO

Prove: $\frac{ID}{IV} = \frac{ED}{EO}$



Given: $\triangle PQR$ and $\triangle UTS$

Verify: $\triangle PQR \sim \triangle UTS$ in a paragraph proof

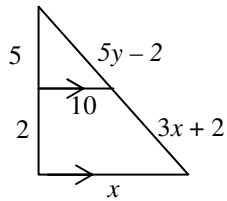


Proportional Relationships – Extra Practice

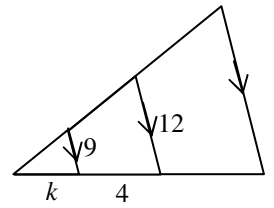
Solve for the variable in each figure.

1. $y =$ _____

$x =$ _____

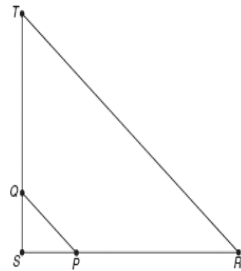


2. $k =$ _____



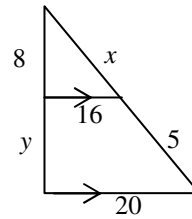
3. $SQ = x$; $ST = 22$;
 $SP = 12$; $PR = 4x+8$

$x =$ _____

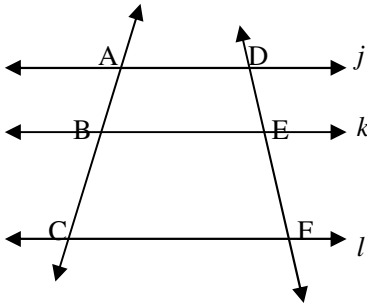


4. $y =$ _____

$x =$ _____



Given: $j \parallel k \parallel l$



5. $AC = 9$; $BC = 6$; $DF = 15$

$EF =$ _____

7. $BC = x + 2$; $BA = 9$; $EF = x + 3$; $ED = 12$

$x =$ _____; $BC =$ _____; $EF =$ _____

6. $AB = 5y$; $DE = 2y$; $EF = 12$

$BC =$ _____

8. $AC = 3x$; $BC = 16$; $EF = 20$; $FD = 4x - 2$

$x =$ _____; $AC =$ _____; $FD =$ _____