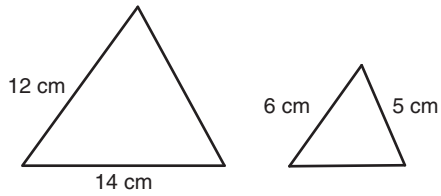
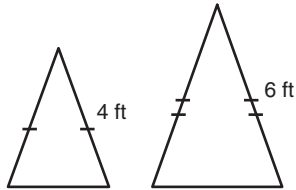


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12. What information would you need to use the Side-Side-Side Similarity Postulate to prove that these triangles are similar?

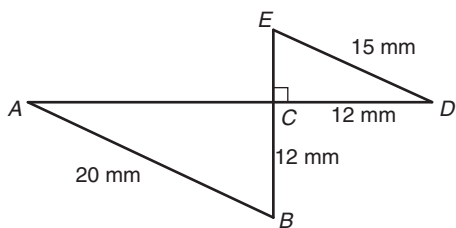


13. What information would you need to use the Side-Side-Side Similarity Postulate to prove that these triangles are similar?



**Complete each paragraph proof to show that the triangles are similar.**

14. Show that triangle  $ABC \sim$  triangle  $DEC$ .



Use the \_\_\_\_\_ . First, use the \_\_\_\_\_ to calculate  $AC$  and  $EC$ .

$$AC^2 = \underline{\quad}^2 - \underline{\quad}^2$$

$$EC^2 = \underline{\quad}^2 - \underline{\quad}^2$$

$$AC^2 = \underline{\quad} - \underline{\quad}$$

$$EC^2 = \underline{\quad} - \underline{\quad}$$

$$AC^2 = \underline{\quad}$$

$$EC^2 = \underline{\quad}$$

$$AC = \underline{\quad} \text{ mm}$$

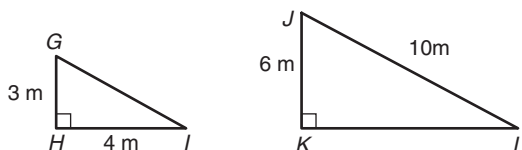
$$EC = \underline{\quad} \text{ mm}$$

Next, calculate the ratios of the corresponding sides.

$$\frac{AC}{DC} = \underline{\quad} \quad \frac{BC}{EC} = \underline{\quad} \quad \frac{AB}{DE} = \underline{\quad}$$

All of the corresponding sides are \_\_\_\_\_. So by the \_\_\_\_\_, triangle  $ABC \sim$  triangle  $DEC$ .

15. Show that triangle  $GHI \sim$  triangle  $JKL$ .



Use the \_\_\_\_\_ . First, use the \_\_\_\_\_ to calculate  $GI$  and  $KL$ .

$$GI^2 = \underline{\quad}^2 + \underline{\quad}^2$$

$$KL^2 = \underline{\quad}^2 - \underline{\quad}^2$$

$$GI^2 = \underline{\quad} + \underline{\quad}$$

$$KL^2 = \underline{\quad} - \underline{\quad}$$

$$GI^2 = \underline{\quad}$$

$$KL^2 = \underline{\quad}$$

$$GI = \underline{\quad} \text{ m}$$

$$KL = \underline{\quad} \text{ m}$$

Next, calculate the ratios of the corresponding sides.

$$\frac{GH}{JK} = \underline{\quad} \quad \frac{HI}{KL} = \underline{\quad} \quad \frac{GI}{JL} = \underline{\quad}$$

All of the corresponding sides are \_\_\_\_\_. So by the \_\_\_\_\_, triangle  $GHI \sim$  triangle  $JKL$ .