Geometry

7.3 Use Similar Right Triangles

similar

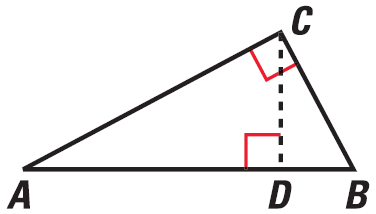
hypotenuse

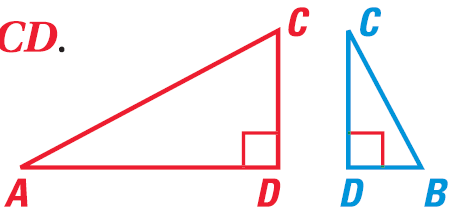
altitude

If the \_\_\_\_\_\_\_\_\_\_\_\_ is drawn to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of a right triangle, then the two triangles formed are \_\_\_\_\_\_\_\_\_\_\_\_\_ to the \_\_\_\_\_\_\_\_\_\_\_\_ triangle and to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

each other

original

ΔCBD ~ ΔABC, ΔACD ~ ΔABC, ΔCBD ~ ΔACD



Identify the similar triangles. Then find x.

E

G

3

x

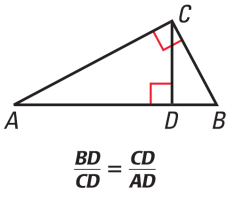
H

5

F

4

ΔEFG ~ ΔGFH ~ ΔEHG



geometric

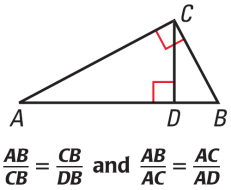
altitude

If the altitude is drawn to the hypotenuse of a right triangle, then the \_\_\_\_\_\_\_\_\_\_\_\_ is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ of the two \_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

hypotenuse

segments

mean



geometric

leg

If the altitude is drawn to the hypotenuse of a right triangle, then each \_\_\_\_\_\_\_\_\_ is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ adjacent to that leg.

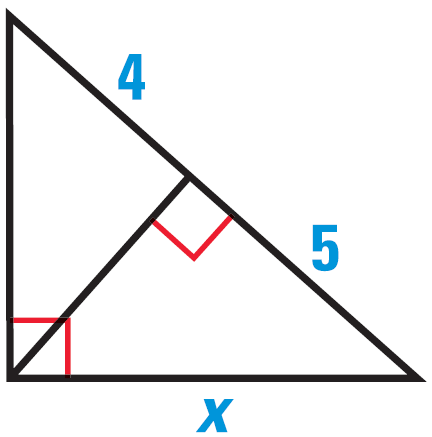
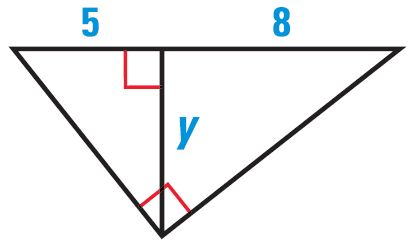
hypotenuse

segment

hypotenuse

mean

Find the value of x or y.



Assignment: 453 #4-26 even, 30-34 even, 40-48 even = 20