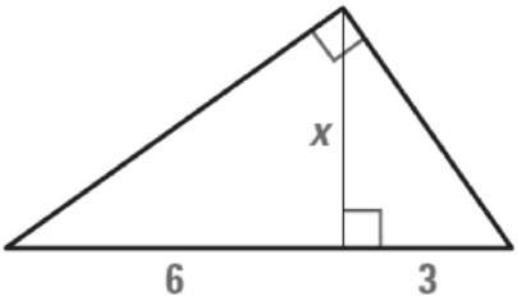
Find the value of each variable.

a.

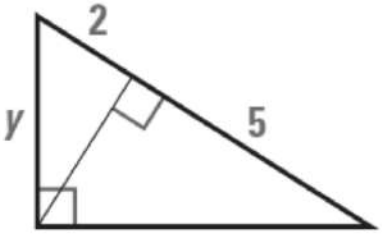


$\frac{6}{x} = \frac{x}{3}$

$x^2 = 18$

$x = 4.24$

b.

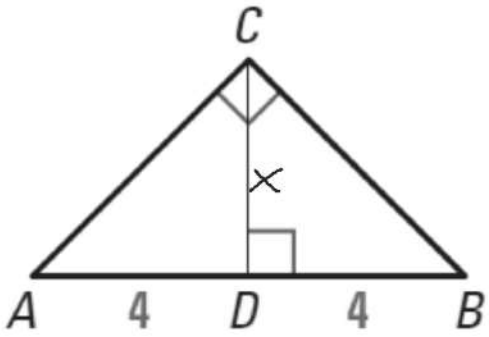


$\frac{2}{y} = \frac{y}{7}$

$y^2 = 14$

$y = 3.74$

23. Find CD.

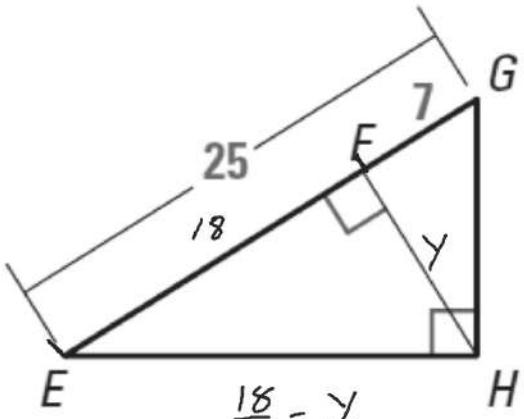


$\frac{4}{x} = \frac{x}{4}$

$x^2 = 16$

$x = 4$

24. Find FH.



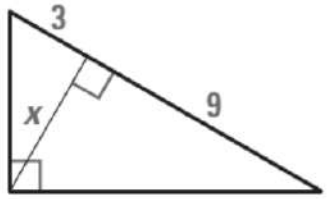
$\frac{18}{y} = \frac{y}{7}$

$y^2 = 126$

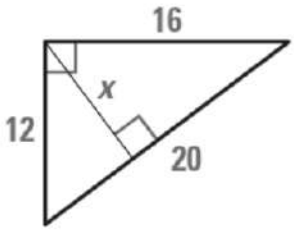
$y = 11.22$

USING ALGEBRA **Find the value of each variable.**

25.



26.



27.

$\frac{7}{5} = \frac{5}{x}$

$\frac{7}{5} = \frac{5}{m-7}$

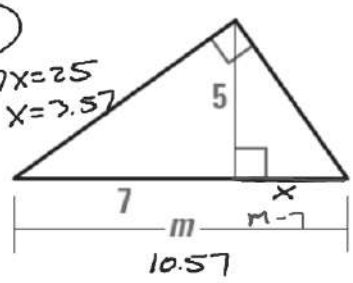
$7m - 49 = 25$

$7m = 74$

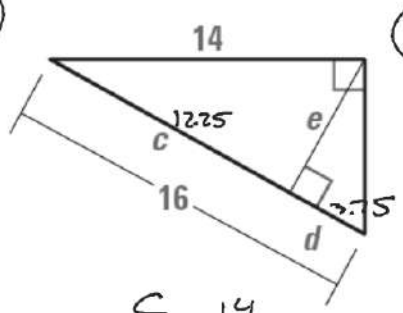
$m = 10.57$

$7x = 25$

$x = 3.57$



28.



$\frac{c}{14} = \frac{14}{16}$

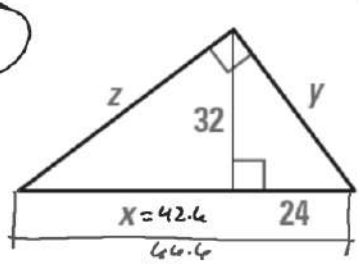
$16c = 196$

$c = 12.25$

$\frac{12.25}{e} = \frac{e}{3.75}$

$e = 6.77$

29.



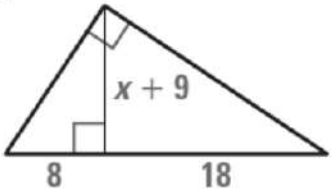
$\frac{x}{32} = \frac{32}{24}$

$x = 42.6$

$\frac{24}{y} = \frac{y}{66.6}$

$y = 39.97$

30.

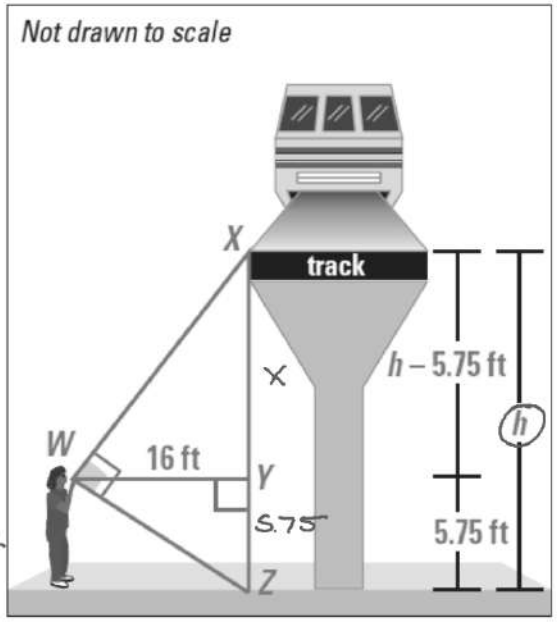


$\frac{42.6}{z} = \frac{z}{66.6}$

$z^2 = (42.6)(66.6)$

$= 53.26$

MONORAIL TRACK To estimate the height of a monorail track, your friend holds a cardboard square at eye level. Your friend lines up the top edge of the square with the track and the bottom edge with the ground. You measure the distance from the ground to your friend's eye and the distance from your friend to the track.



$$\frac{5.75}{16} = \frac{16}{h-5.75}$$

$$5.75(h-5.75) = 16^2$$

$$5.75h - 33.065 = 256$$

$$5.75h = 289.0625$$

$$h = 50.27$$