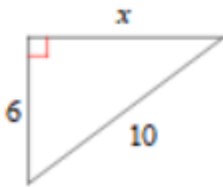


Find the missing side of each triangle. Round your answers to the nearest tenth if necessary.

1)



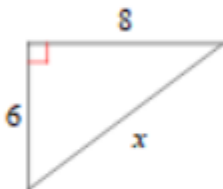
$$\begin{aligned}6^2 + x^2 &= 10^2 \\36 + x^2 &= 100 \\x^2 &= 64 \\x &= 8\end{aligned}$$

2)



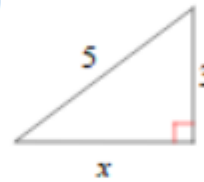
$$\begin{aligned}x^2 + 3^2 &= 5^2 \\x^2 + 9 &= 25 \\x^2 &= 16 \\x &= 4\end{aligned}$$

3)



$$\begin{aligned}6^2 + 8^2 &= x^2 \\36 + 64 &= x^2 \\100 &= x^2 \\10 &= x\end{aligned}$$

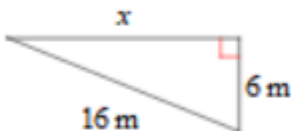
4)



$$\begin{aligned}x^2 + 3^2 &= 5^2 \\x^2 + 9 &= 25 \\x^2 &= 16 \\x &= 4\end{aligned}$$

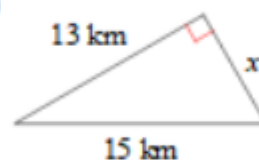
Find the missing side of each triangle. Leave your answers in simplest radical form.

5)



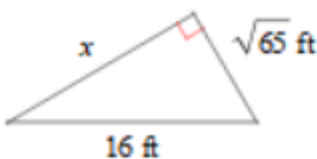
$$\begin{aligned}x^2 + 6^2 &= 16^2 \\x^2 + 36 &= 196 \\x^2 &= 160 \\x &= 4\sqrt{10}\end{aligned}$$

6)



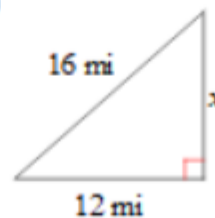
$$\begin{aligned}x^2 + 13^2 &= 15^2 \\x^2 + 169 &= 225 \\x^2 &= 56 \\x &= 2\sqrt{14}\end{aligned}$$

7)

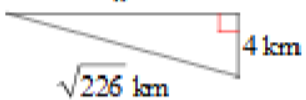


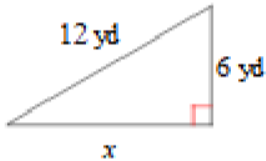
$$\begin{aligned}x^2 + (\sqrt{65})^2 &= 16^2 \\x^2 + 65 &= 256 \\x^2 &= 191 \\x &= \sqrt{191}\end{aligned}$$

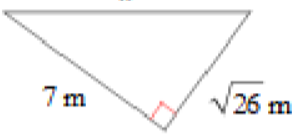
8)

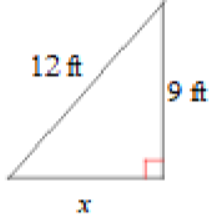


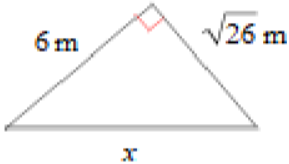
$$\begin{aligned}x^2 + 12^2 &= 16^2 \\x^2 + 144 &= 256 \\x^2 &= 112 \\x &= 4\sqrt{7}\end{aligned}$$

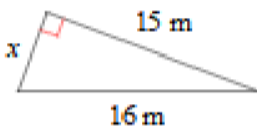
9)   $x^2 + 4^2 = \sqrt{226}^2$   
 $x^2 + 16 = 226$   
 $x^2 = 210$   
 $x = \sqrt{210}$

10)   $x^2 + 6^2 = 12^2$   
 $x^2 + 36 = 144$   
 $x^2 = 108$   
 $x = 3\sqrt{12}$


11)   $7^2 + \sqrt{26}^2 = x^2$   
 $49 + 26 = x^2$   
 $75 = x^2$   
 $5\sqrt{3} = x$

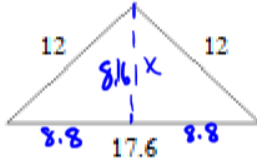
12)   $x^2 + 9^2 = 12^2$   
 $x^2 + 81 = 144$   
 $x^2 = 63$   
 $x = 3\sqrt{7}$

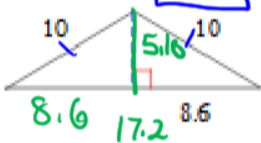
13)   $6^2 + \sqrt{26}^2 = x^2$   
 $36 + 26 = x^2$   
 $62 = x^2$   
 $\sqrt{62} = x$


14)   $x^2 + 16^2 = 15^2$   
 $x^2 + 225 = 256$   
 $x^2 = 31$   
 $x = \sqrt{31}$

Find the area of each triangle. Round intermediate values to the nearest tenth. Use the rounded values to calculate the next value. Round your final answer to the nearest tenth.  $A = \frac{1}{2} b \cdot h$

15)   $4^2 + x^2 = 8^2$   
 $16 + x^2 = 64$   
 $x^2 = 48$   
 $x = 4\sqrt{3}$   
 $A = \frac{1}{2}(4)(4) = 8$   
 $A = \frac{1}{2}(4)(4\sqrt{3}) = 8\sqrt{3}$   
 $A_{\text{total}} = 8 + 8\sqrt{3} = 16.86$

16)   $8.8^2 + x^2 = 12^2$   
 $77.44 + x^2 = 144$   
 $x^2 = 66.56$   
 $x = 8.16$   
 $A = \frac{1}{2}(8.16)(17.6) = 21.68$

17)   $8.6^2 + x^2 = 10^2$   
 $73.96 + x^2 = 100$   
 $x^2 = 26.04$   
 $x = 5.10$   
 $A = \frac{1}{2}(5.10)(17.2)$   
 $A = 43.86$

18)   $2.2^2 + x^2 = 5^2$   
 $4.84 + x^2 = 25$   
 $x^2 = 20.16$   
 $x = 4.49$   
 $A = \frac{1}{2}(2.2)(4.49)$   
 $A = 4.94$