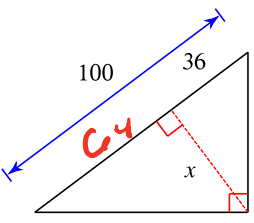
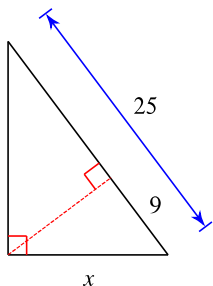
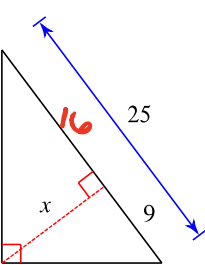


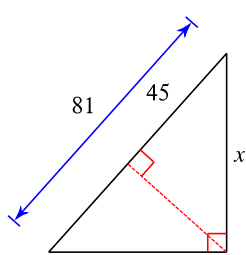
Similar Right Triangles

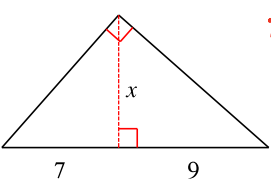
Find the missing length indicated. Leave your answer in simplest radical form.

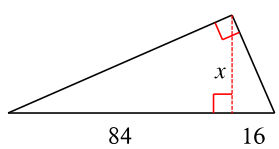
1)  $x^2 = 64 \cdot 36$
 $x = \pm \sqrt{64 \cdot 36}$
 $x = 8 \cdot 6$
 $x = 48$

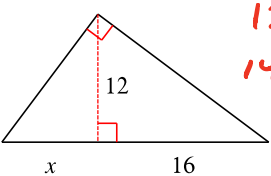
2)  $x^2 = 9 \cdot 25$
 $x = \pm \sqrt{9 \cdot 25}$
 $x = 3 \cdot 5$
 $x = 15$

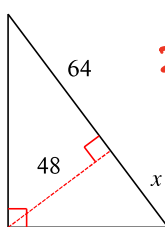
3)  $x^2 = 16 \cdot 9$
 $x = \pm \sqrt{16 \cdot 9}$
 $x = 4 \cdot 3$
 $x = 12$

4)  $x^2 = 45 \cdot 81$
 $x = \pm \sqrt{45 \cdot 81}$
 $x = \sqrt{5 \cdot 9 \cdot 81}$
 $x = 3 \cdot 9 \sqrt{5}$
 $x = 27 \sqrt{5}$

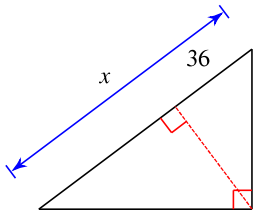
5)  $x^2 = 7 \cdot 9$
 $x = \pm \sqrt{7 \cdot 9}$
 $x = 3 \sqrt{7}$

6)  $x^2 = 84 \cdot 16$
 $x = \pm \sqrt{21 \cdot 4 \cdot 16}$
 $x = 2 \cdot 4 \sqrt{21}$
 $x = 8 \sqrt{21}$

7)  $12^2 = x \cdot 16$
 $144 = x \cdot 16$
 $9 = x$

8)  $48^2 = 64 \cdot x$
 $2304 = 64x$
 $36 = x$

9)

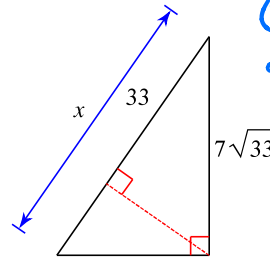


$$60^2 = 36 \cdot x$$

$$3600 = 36x$$

$$100 = x$$

10)

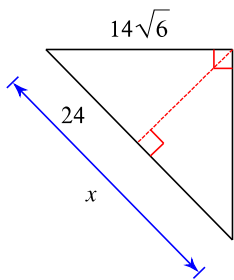


$$(7\sqrt{33})^2 = 33x$$

$$49 \cdot 33 = 33x$$

$$49 = x$$

11)



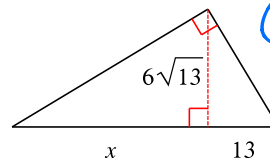
$$(14\sqrt{6})^2 = 24 \cdot x$$

$$196 \cdot 6 = 24 \cdot x$$

$$1176 = 24x$$

$$49 = x$$

12)

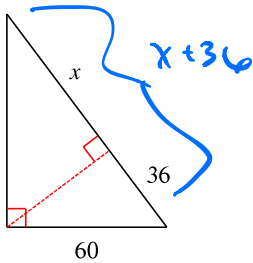


$$(6\sqrt{13})^2 = 13 \cdot x$$

$$36 \cdot 13 = 13x$$

$$36 = x$$

13)



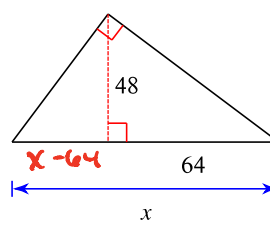
$$60^2 = 36(x+36)$$

$$3600 = 36x + 1296$$

$$2304 = 36x$$

$$64 = x$$

14)



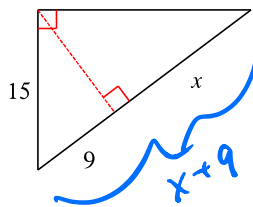
$$48^2 = 64(x-64)$$

$$2304 = 64x - 4096$$

$$6400 = 64x$$

$$100 = x$$

15)



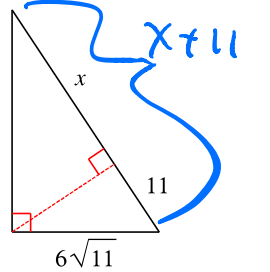
$$15^2 = 9(x+9)$$

$$225 = 9x + 81$$

$$144 = 9x$$

$$16 = x$$

16)



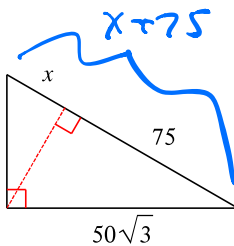
$$(6\sqrt{11})^2 = 11(x+11)$$

$$36 \cdot 11 = 11(x+11)$$

$$36 = x+11$$

$$25 = x$$

17)



$$(50\sqrt{3})^2 = 75(x+75)$$

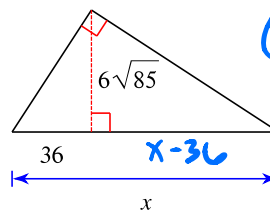
$$2500 \cdot 3 = 75x + 5625$$

$$7500 = 75x + 5625$$

$$1875 = 75x$$

$$25 = x$$

18)



$$(6\sqrt{85})^2 = 36(x-36)$$

$$36 \cdot 85 = 36(x-36)$$

$$85 = x-36$$

$$121 = x$$