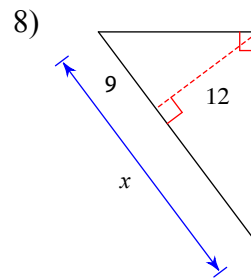
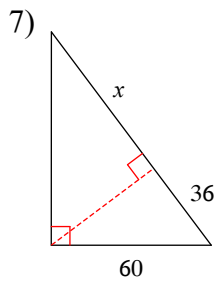
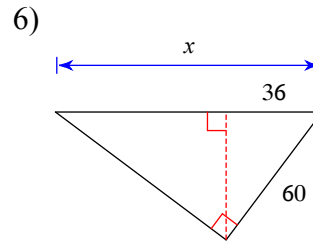
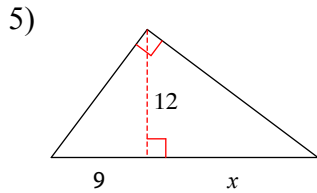
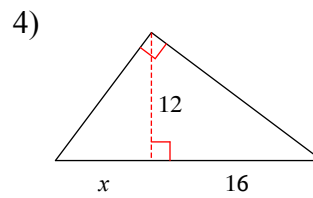
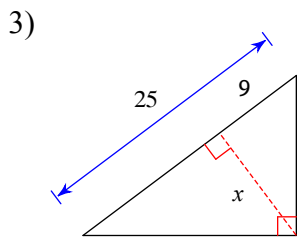
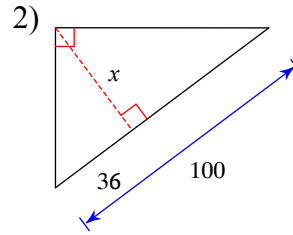
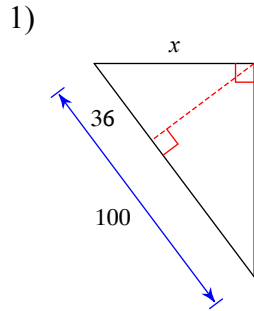
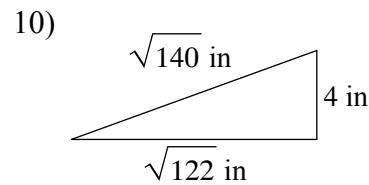
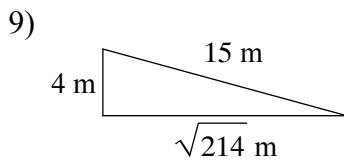


Chapter 8: Right Triangles and Trigonometry

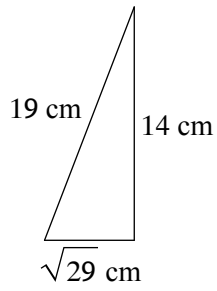
Find the missing length indicated. Leave your answer in simplest radical form.



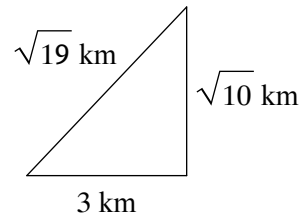
State if each triangle is a right triangle.



11)

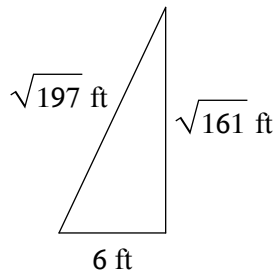


12)

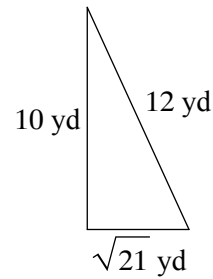


State if each triangle is acute, obtuse, or right.

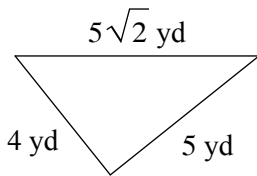
13)



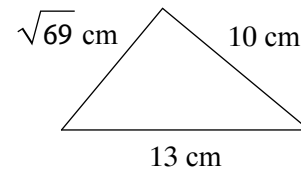
14)



15)

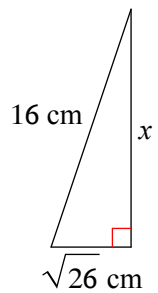


16)

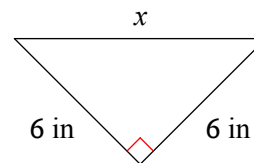


Find the missing side of each triangle. Leave your answers in simplest radical form.

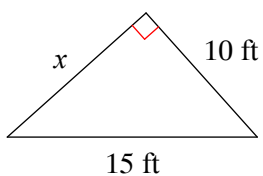
17)



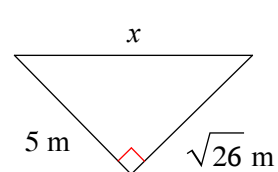
18)



19)

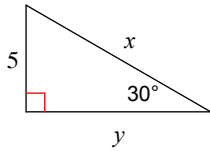


20)

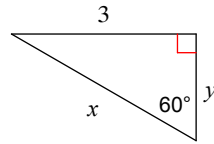


Find the missing side lengths. Leave your answers as radicals in simplest form.

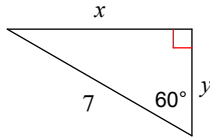
21)



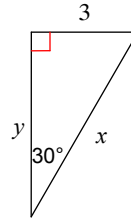
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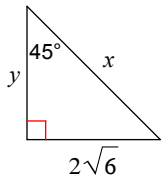
23)



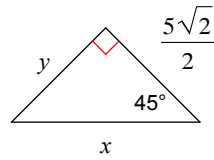
24)



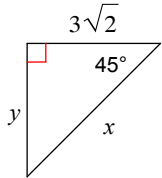
25)



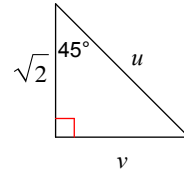
26)



27)

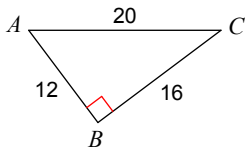


28)

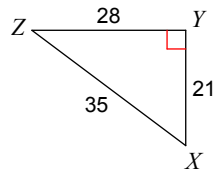


Find the value of each trigonometric ratio.

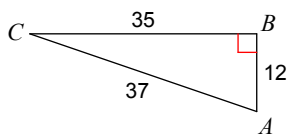
29) $\cos A$



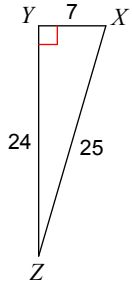
30) $\cos Z$



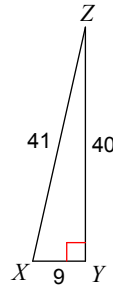
31) $\cos C$



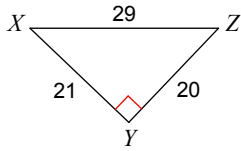
32) $\sin Z$



33) $\tan X$

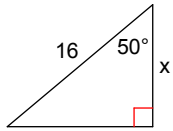


34) $\cos X$

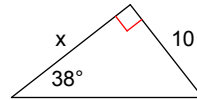


Find the missing side. Round to the nearest tenth.

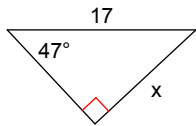
35)



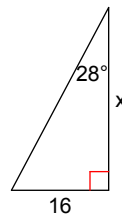
36)



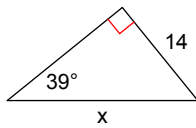
37)



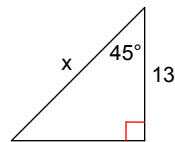
38)



39)

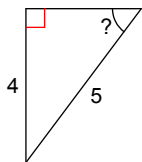


40)

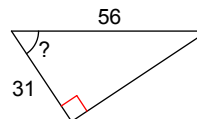


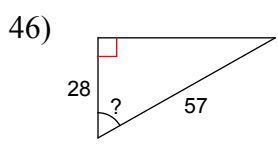
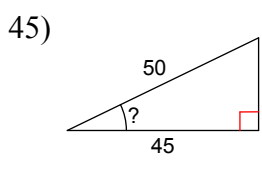
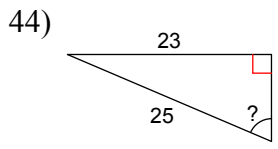
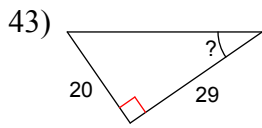
Find the measure of the indicated angle to the nearest degree.

41)



42)





Answers to Chapter 8: Right Triangles and Trigonometry (ID: 2)

- 1) 60 2) 48 3) 12 4) 9
5) 16 6) 100 7) 64 8) 25
9) No 10) No 11) No 12) Yes
13) Right 14) Obtuse 15) Obtuse 16) Right
17) $\sqrt{230}$ cm 18) $6\sqrt{2}$ in 19) $5\sqrt{5}$ ft 20) $\sqrt{51}$ m
21) $x = 10, y = 5\sqrt{3}$ 22) $x = 2\sqrt{3}, y = \sqrt{3}$ 23) $x = \frac{7\sqrt{3}}{2}, y = \frac{7}{2}$ 24) $x = 6, y = 3\sqrt{3}$

25) $x = 4\sqrt{3}, y = 2\sqrt{6}$ 26) $x = 5, y = \frac{5\sqrt{2}}{2}$ 27) $x = 6, y = 3\sqrt{2}$

28) $u = 2, v = \sqrt{2}$ 29) $\frac{3}{5}$ 30) $\frac{4}{5}$ 31) $\frac{35}{37}$

32) $\frac{7}{25}$ 33) $\frac{40}{9}$ 34) $\frac{21}{29}$ 35) 10.3

36) 12.8 37) 12.4 38) 30.1 39) 22.2
40) 18.4 41) 53° 42) 56° 43) 35°
44) 67° 45) 26° 46) 61°