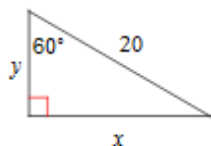


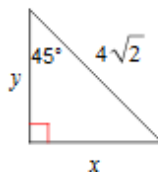
Trigonometry Review

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

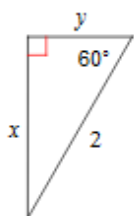
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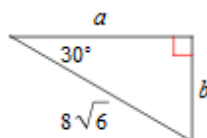
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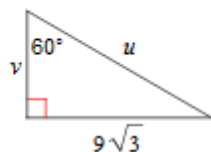
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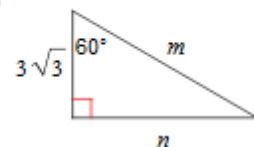
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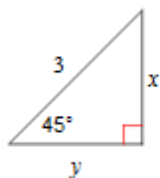
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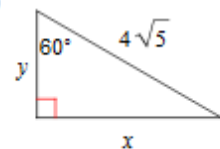
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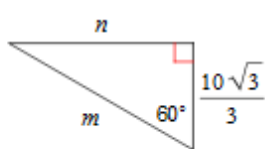
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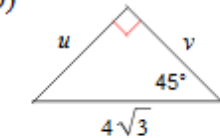
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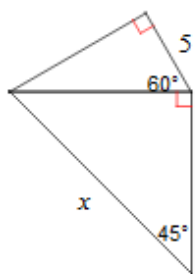
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10)



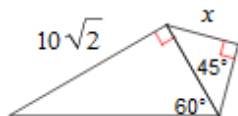
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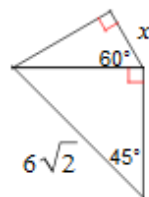
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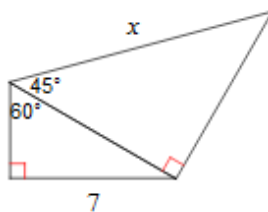
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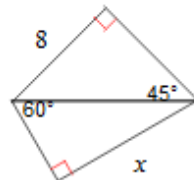
14)



15)

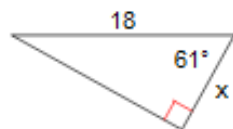


16)

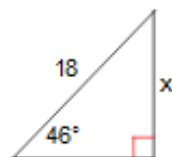


Find the missing side. Round to the nearest tenth.

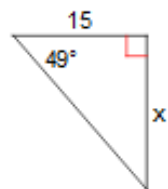
17)



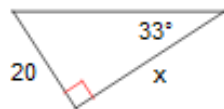
18)



19)



20)

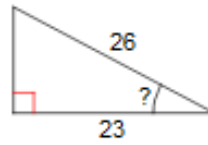


Find the measure of the indicated angle to the nearest degree.

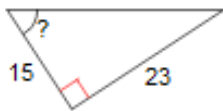
21)



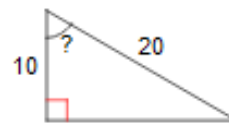
22)



23)



24)



25) Mrs. Smith is at the top of a 150-foot cliff and spots two sailboats. She notices that the angle of depression to one sailboat is 22° and to the other it is 29° . How far apart are the two sailboats?

26) A 96 foot tree casts a shadow that is 120 feet long. What is the angle of elevation of the sun?

27) A man is lying on the beach, flying a kite. He holds the end of the kite string at ground level and estimates the angle of elevation of the kite to be 50° . If the string is 450 feet long, how high is the kite above the ground?

- 28) The altitude of an equilateral triangle is 5 cm. What is the length of a side of the triangle?
- 29) An office worker on the fourteenth floor of a building sight a friend on the street. The angle of depression is 35° , and the fourteenth floor is 135 ft in the air. How far is the friend from the building?
- 30) The angle of elevation to the top of the Empire State Building in New York is found to be 11° from the ground at a distance of 1 mile from the base of the building. Using this information, find the height of the Empire State Building in feet.
- 31) Orlando and Ryan are taking measurements related to the installation of a TV tower. Orlando measures a 62° angle of elevation to the top of the 950 ft TV tower. Find the angle of elevation for Ryan, standing 80 ft farther from the tower than Orlando.
- 32) The angle of depression from the top of a 320 foot office building to the top of a 200 foot office building is 55° . How far apart are the two buildings?
- 33) An airplane is flying at an elevation of 5150 ft, directly above a straight highway. Two motorists are driving cars on the highway on opposite sides of the plane, and the angle of depression to one car is 35° and to the other is 52° . How far apart are the cars?