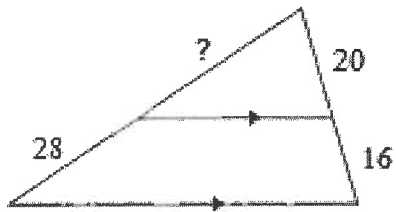
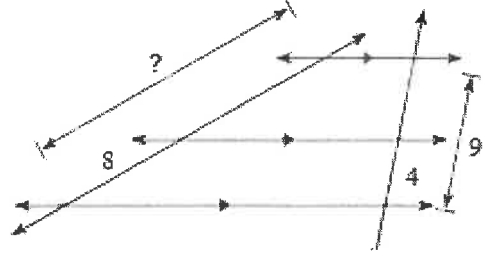


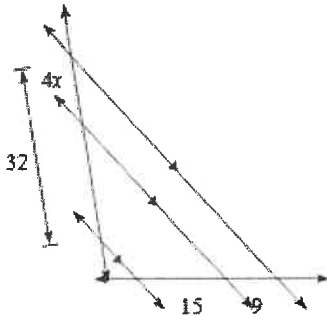
1)



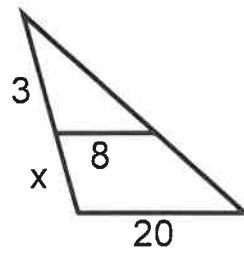
2)



3)

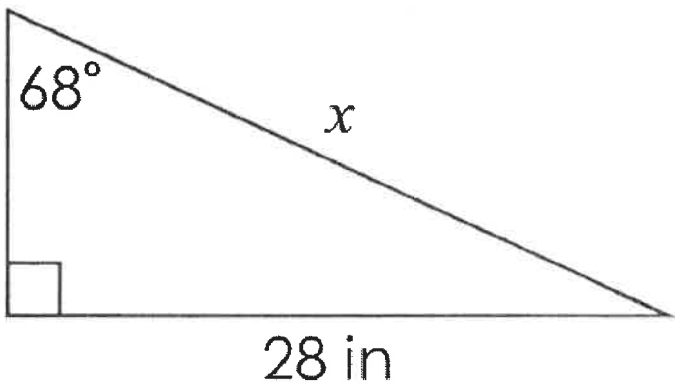


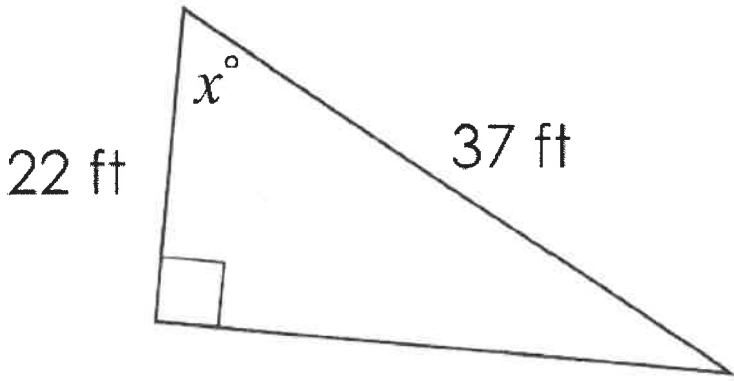
4.

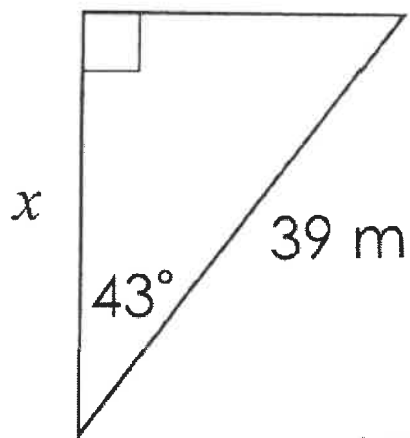


The angle of elevation to the top of the Empire State Building in New York is  $11^\circ$  from a point on the ground 3200 feet from the base of the building. Find the height of the Empire State Building in feet.

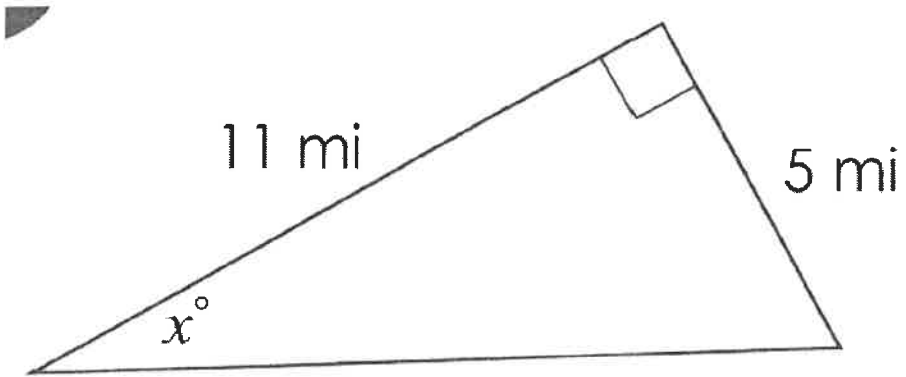
A 96 foot tree casts a shadow that is 120 feet long.  
What is the angle of elevation of the sun?







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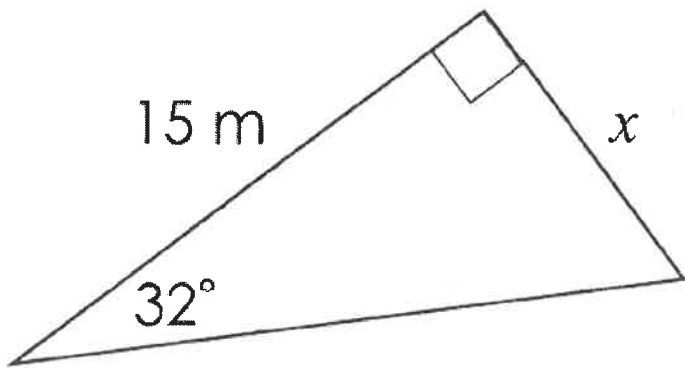


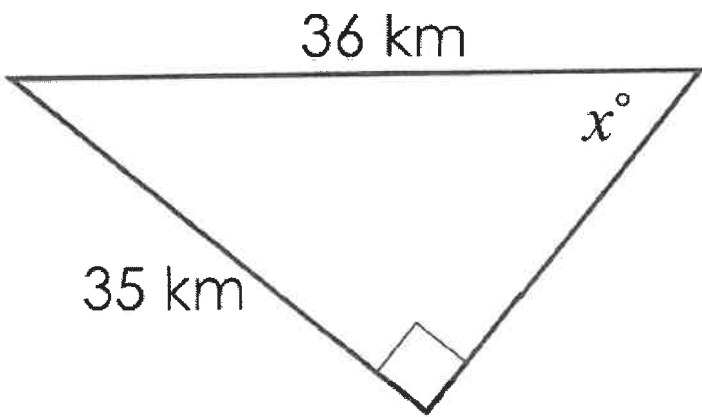
Courtney made a 5.5-foot ramp to help her dog get in her minivan. If the back of her van is 3 feet from the ground, what will be the angle of elevation from the base of the ramp to the van? Round to the nearest tenth of a degree.

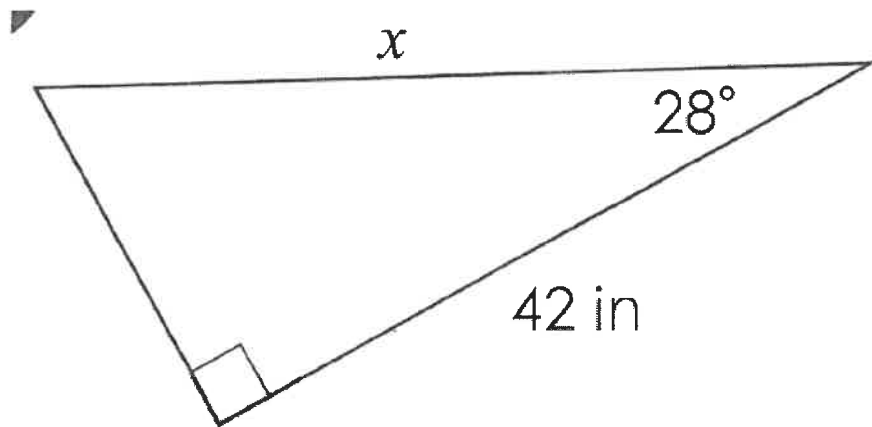


Coach Jump is standing on a platform watching the football team practice. If the platform is 12 feet high and the quarterback is standing 23 feet from the base of the platform, find the angle of depression from where Coach Jump is standing to the quarterback.

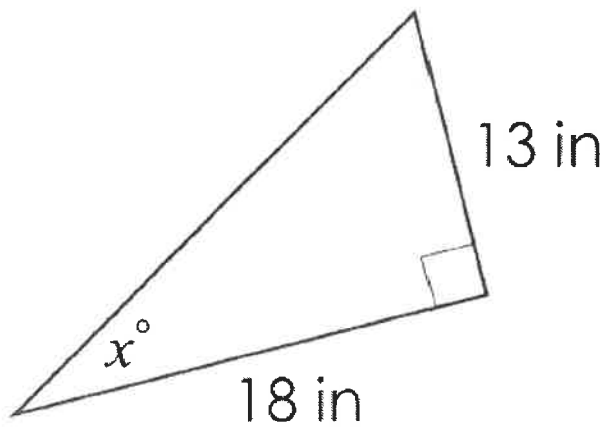
Ben is standing 8 feet from the base of a telephone pole. The angle of elevation from the point on the ground where he is standing to the top of the pole is  $62^\circ$ . Find the height of the telephone pole. Round to the nearest tenth.



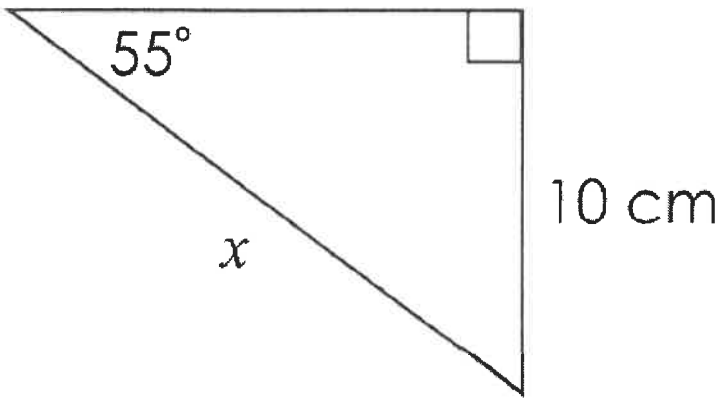




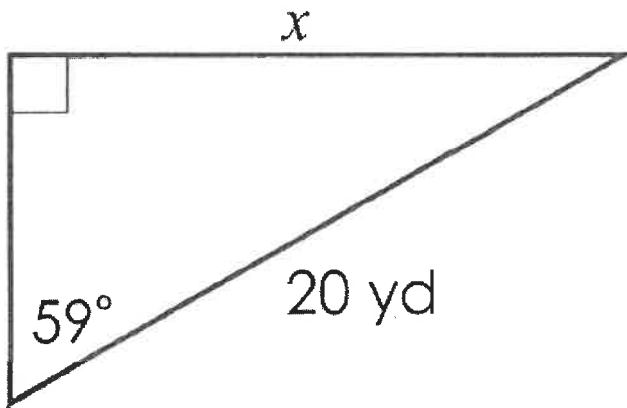
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A 24-foot wire is tied from a stake in the ground to the top of flagpole. If the angle of elevation from the stake to the top of the flagpole is  $53^\circ$ , how far is the stake from the base of the flagpole? Round to the nearest tenth.







Juliet is standing at the edge of a balcony looking down at Romeo on the ground below. The angle of depression from the point where Juliet is standing to Romeo is  $37^\circ$ .

If the balcony is 15 feet from the ground, how far is Romeo from the base of the house?

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