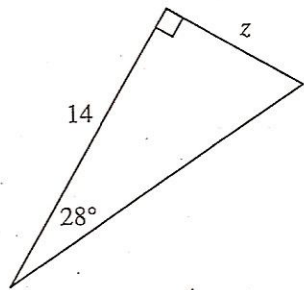
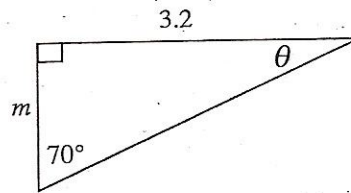


Use the tangent button on your calculator to solve for the variables. It may be helpful to rotate the triangle so that it resembles a slope triangle.

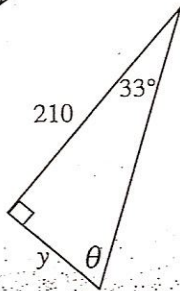
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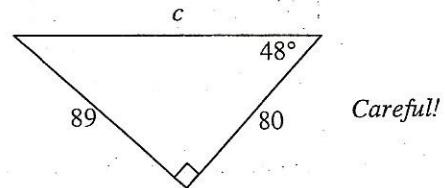
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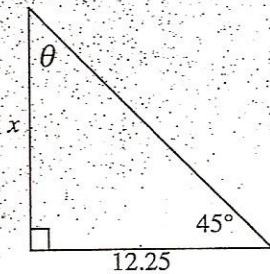
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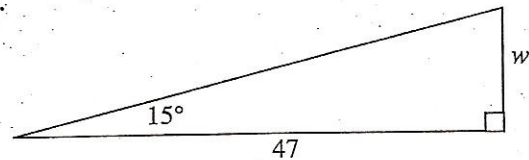
8.



9.



10.



11. A ladder makes a  $75^\circ$  angle with the wall it is leaning against. The base of the ladder is 5 feet from the wall. How high up the wall does the ladder reach?
12. Davis and Tess are 30 feet apart when Tess lets go of her helium-filled balloon, which rises straight up into the air. (It is a windless day.) After 4 seconds, Davis uses his clinometer to site the angle of elevation to the balloon at  $35^\circ$ . If Davis' eye height is 4 feet, 6 inches, what is the height of the balloon after 4 seconds?