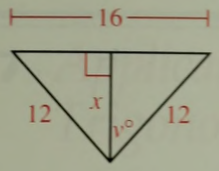
10.



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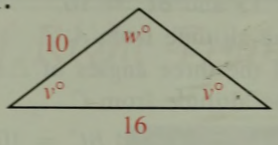

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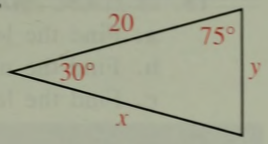
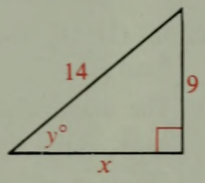
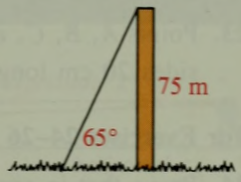


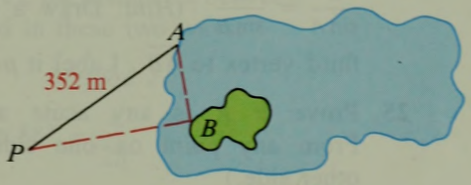
13. **a.** Use the Pythagorean Theorem to find the value of x in radical form.
b. Use trigonometry to find the values of y, then x.
c. Are the values of x from parts (a) and (b) in reasonable agreement?



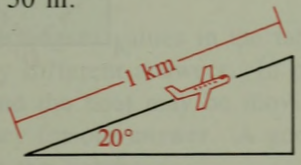
B **14.** A guy wire is attached to the top of a 75 m tower and meets the ground at a 65° angle. How long is the wire?



15. To find the distance from point A on the shore of a lake to point B on an island in the lake, surveyors locate point P with $m\angle PAB = 65$ and $m\angle APB = 25$. By measurement, $PA = 352$ m. Find AB.



16. A certain jet is capable of a steady 20° climb. How much altitude does the jet gain when it moves 1 km through the air? Answer to the nearest 50 m.



17. A 6 m ladder reaches higher up a wall when placed at a 70° angle than when placed at a 60° angle. How much higher, to the nearest tenth of a meter?