7.4 Finding Missing Angle Measurements Using Trig Ratios

NAME: _____ HOUR: _____

Use inverse trig operations to find each angle measure to the *nearest degree*.

1. $\sin y = 0.8829$

2. $\tan w = 57.2900$

3. $\cos v = 0.5878$

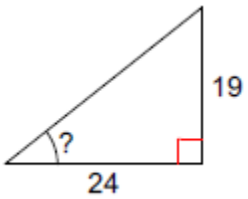
4. $\cos b = 0.1736$

5. $\tan w = 4.0108$

6. $\sin z = 0.6691$

Find the measure of the indicated angle to the *tenth of a degree.* Show your work.

7.



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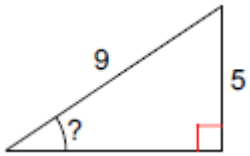

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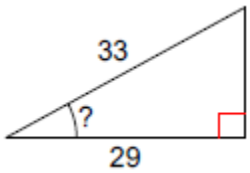

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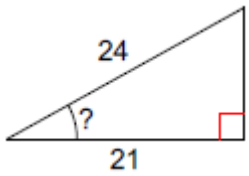

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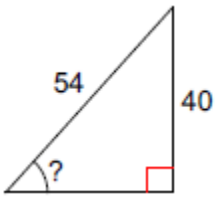

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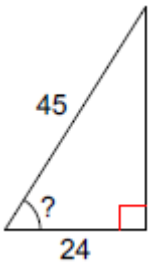

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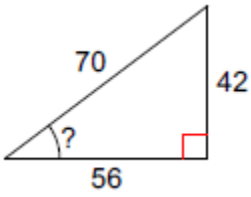

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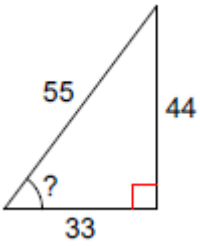
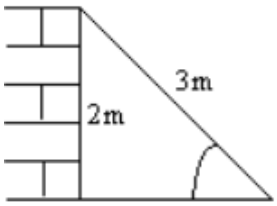


Application

15. A ladder 3 m long leans against a wall. It reaches 2m up the wall. What angle does the ladder make with the ground?



16. A builder wishes to construct a ramp 24 feet long that rises to a height of 5 feet above the ground. Sketch a picture of the problem and use trig ratios to find the angle of elevation of the ramp.