

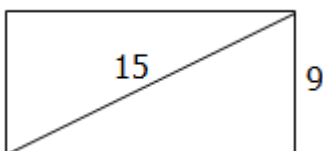
Show all work!



STOP BLAMING ME!
 I DID NOT EAT IT!

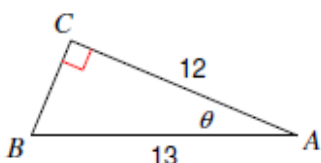
No Excuses!

1) Find the perimeter of the rectangle.

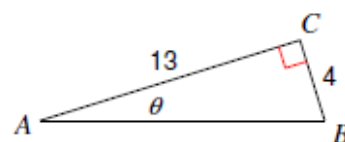


2) Solve for the variable. Round each side length to the nearest tenth, and the angle measures to the nearest degree.

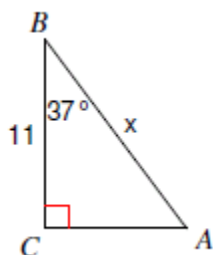
1)



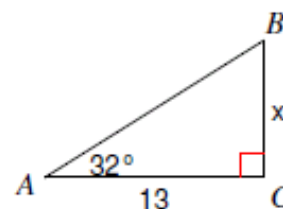
2)



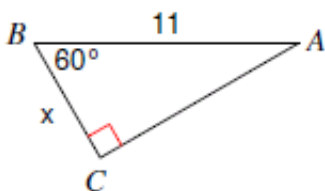
3)



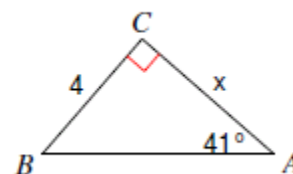
4)



5)



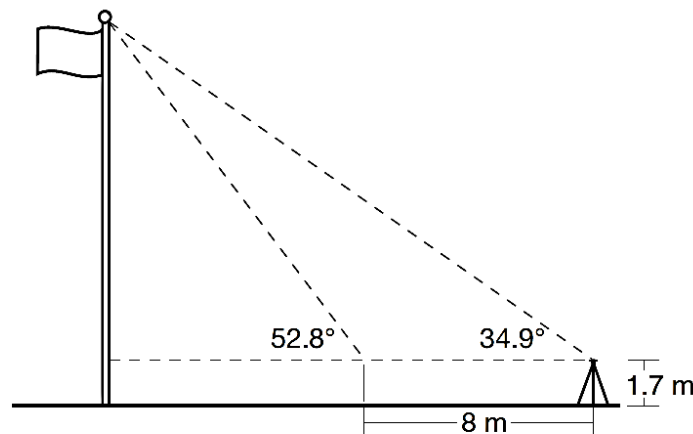
6)



For each problem, draw a picture/diagram showing the right triangle. Then write a trig ratio equation, and solve the equation to answer the problem.

<p>7) A five-meter-long ladder leans against a wall, with the top of the ladder being four meters above the ground. <u>What is the approximate angle that the ladder makes with the ground?</u></p>	<p>8) Jack sees a rocket at an angle of elevation of 11°. If the rocket launch pad is 5 miles away from him, <u>how high is the rocket to the nearest hundredth of a mile?</u></p>
<p>9) If A and B are acute angles in a right triangle. Solve for x.</p> <p>$\sin A = 4x - 2$ $\cos B = 8x - 4$</p>	<p>10) Solve for x.</p> <p>$\sin\left(\frac{1}{3}x + 2\right) = \cos(53^\circ)$</p>

- 11) Cathy wants to determine the height of the flagpole shown in the diagram below. She uses a survey instrument to measure the angle of elevation to the top of the flagpole, and determines it to be 34.9° . She walks 8 meters closer and determines the new measure of the angle of elevation to be 52.8° . At each measurement, the survey instrument is 1.7 meters above the ground.



Determine and state, to the *nearest tenth of a meter*, the height of the flagpole.