

**Section 4.2 Achievement Check Rubric**

<b>Categories</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>
<b>Knowledge and Understanding</b> <ul style="list-style-type: none"> <li>• Draws a diagram to represent the problem.</li> </ul>	Demonstrates limited understanding of the problem by not being able to visualize the problem.	Demonstrates some understanding of the problem by being able to visualize the problem with some assistance.	Demonstrates considerable understanding of the problem by being able to visualize the problem.	Demonstrates thorough understanding of the problem by being able to visualize the problem and drawing an accurate diagram.
<b>Thinking</b> <ul style="list-style-type: none"> <li>• Prepares a plan to solve the problem.</li> <li>• Carries out the plan.</li> </ul>	Needs extensive assistance to begin organizing a plan and needs clearly laid out steps to follow.	Needs some assistance to begin organizing a plan and needs some steps to follow.	Needs minimal assistance to organize and implement an effective strategy.	Needs no assistance to organize and implement an effective strategy.
<b>Communication</b> <ul style="list-style-type: none"> <li>• Clear explanations and full justifications.</li> <li>• Correct use of mathematical language.</li> </ul>	Maintains the correct units and notation in some of the solution. Does not clearly explain or justify solution.	Maintains the correct units and notation throughout most of the solution. Explains and justifies solution somewhat.	Maintains the correct units and notation throughout the solution. Explains and justifies solution fully.	Maintains the correct units and notation throughout the solution. Explains, justifies, and shows insight into the complexities of the solution.
<b>Application</b> <ul style="list-style-type: none"> <li>• Uses the Pythagorean theorem and trigonometry to solve the problem.</li> </ul>	Interprets the information ineffectively and incorrectly finds the distance and the angle.	Interprets the information somewhat effectively to correctly find the distance and the angle.	Interprets the information with considerable effectiveness by correctly finding the distance and the angle.	Interprets the information with a high degree of effectiveness by correctly finding the distance, mentioning the invalid solution, and finding the angle.