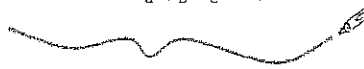


## Pythagorean Theorem Project

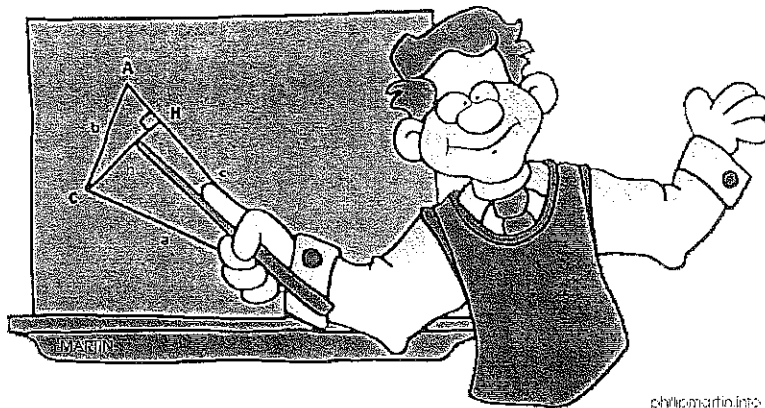


Pythagorean Theorem

$$a^2 + b^2 = c^2$$



You will be creating your own geometry problem! The problem must require its solver to find both the perimeter and area of a figure that you create. The solver must be required to use the Pythagorean Theorem at some point in the problem to find one of the dimensions that are missing. The more complex the problem, the higher your grade will be.



### You will be creating...

- A scale drawing of your problem. (Example: If you label a side as measuring 3 cm, then it needs to actually measure 3 inches.)
- A separate sheet of paper that has the solution (with the work included) to your problem.

<p>E (55%) Failing</p>	<p>Three or more of the following are <u>not true</u>...</p> <ul style="list-style-type: none"> <li>• ___ Dimensions are drawn to scale.</li> <li>• ___ Problem is drawn neatly and appears professional.</li> <li>• ___ Pythagorean Theorem is required in one place.</li> <li>• ___ Solution is mathematically sound.</li> </ul>	<p>22 points</p>
<p>D (65%) Non-Proficient</p>	<p>Two of the following are <u>not true</u>...</p> <ul style="list-style-type: none"> <li>• ___ Dimensions are drawn to scale.</li> <li>• ___ Problem is drawn neatly and appears professional.</li> <li>• ___ Pythagorean Theorem is required in one place.</li> <li>• ___ Solution is mathematically sound.</li> </ul>	<p>26 points</p>
<p>C (75%) Developing</p>	<p>One of the following is <u>not true</u>...</p> <ul style="list-style-type: none"> <li>• ___ Dimensions are drawn to scale.</li> <li>• ___ Problem is drawn neatly and appears professional.</li> <li>• ___ Pythagorean Theorem is required in one place.</li> <li>• ___ Solution is mathematically sound.</li> </ul>	<p>30 points</p>
<p>B (85%) Proficient</p>	<p>All of the following are true.</p> <ul style="list-style-type: none"> <li>• ___ Dimensions are drawn to scale.</li> <li>• ___ Problem is drawn neatly and appears professional.</li> <li>• ___ Pythagorean Theorem is required in one place.</li> <li>• ___ Solution is mathematically sound.</li> </ul>	<p>34 points</p>
<p>A (95%) Mastery</p>	<p>All of the following are true.</p> <ul style="list-style-type: none"> <li>• ___ Dimensions are drawn to scale.</li> <li>• ___ Problem is drawn neatly and appears professional.</li> <li>• ___ Pythagorean Theorem is required in two or more places.</li> <li>• ___ Solution is mathematically sound.</li> </ul>	<p>38 points</p>
<p>A+ (100%) Advanced</p>	<p>All of the following are true.</p> <ul style="list-style-type: none"> <li>• ___ Figure is realistically drawn within the context of a real life scenario/picture.</li> <li>• ___ Dimensions are drawn to scale.</li> <li>• ___ Problem is drawn neatly and appears professional.</li> <li>• ___ Pythagorean Theorem is required in three or more places.</li> <li>• ___ Solution is mathematically sound.</li> </ul>	<p>40 points</p>

Total = \_\_\_\_\_/40