## Topic 1: Pythagorean Theorem/Converse

| 1. State the Pythagorean Theorem and label the diagram with a, b, c and leg/hypotenuse. | 2. Fill in the Pythagorean Converse <br> If $a^{2}+b^{2}=c^{2}$, then $\qquad$ <br> If $a^{2}+b^{2}>c^{2}$, then $\qquad$ <br> If $a^{2}+b^{2}<c^{2}$, then $\qquad$ |
| :---: | :---: |
| 3. Solve for the missing side. | 4. Solve for the missing side. |
| 5. Solve for $x$. | 6. Solve for the missing side. |

7. A 72 Inch television is featured in a sales catalog. This distance is the diagonal distance across the television screen. If the screen measures 37 Inches in height, what is the width of the screen?
8. Christina walks from her house 2.5 miles west to get to the library. She then walks 1.7 miles north to the ice cream shop. How far will Christina walk home if she is taking the most direct route?

| 9. $18,24,30$ |  | 10. $8,15,23$ |  |
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|  | - Notas <br> ] Acute <br> - Right <br> - Obtuse |  | - Nota $\Delta$ <br> - Acute <br> - Right <br> - Obtuse |
| 11. 31, 35, 39 |  | 12. $11,19,28$ |  |
|  | - Notas <br> - Acute <br> - Right <br> - Obtuse |  | - $\operatorname{Nota} \Delta$ <br> - Acute <br> - Right <br> - Obtuse |

Topic 2: Special Right Triangles
Label the 45-45-90 triangle and write out the formula(s)

