## The Pythagorean Theorem

## MATH RUBRIC

| Criteria | 4 | 3 | 2 | 1 |
| :---: | :---: | :---: | :---: | :---: |
| Students develop and apply Pythagorean Theorem in the solution of problems | The problems clearly show the use of the Pythagorean <br> Theorem. The formula is written and the work is easily followed. | The problems clearly show the use of the Pyth. Thrm. The formula is written and the work is not so easily followed (messy or sloppy). | The problems are unclear how they were solved. Student has not clearly identified the sides a, $\mathrm{b}, \mathrm{c}$ in the proper parts of the equation, but most answers are correct. | Theorem is incorrectly used. A student show considerable difficulty in solving the problem. |
| Students use number sense and numeration to develop an understanding of the multiple uses of numbers in the real world, the use of numbers to communicate mathematically and the use of numbers in development of mathematical ideas | The paper demonstrates the understanding of the Theorem and how it fits in the real-life applications today. | The paper does not clearly demonstrate the understanding of the multiple uses of the Theorem and how it fits in to reallife applications today. | Some parts are missing or do not make sense. No tie ins to real-life. | Paper shows student lacks understanding of why the theorem is important in reallife. |
| Students explore and use the operations dealing with square roots and powers | Four problems have complete work with exponents of two. Student has demonstrated the proper steps in dealing with the exponents and in taking square roots. Problems that say simplest radical form are not rounded to the nearest tenths place. | Some problems are missing work, the answers are correct but there are missing parts in the problem. The student has not demonstrated that he/she has squared a number or that a square root has been taken. Required answers are not in simplest radical form. | One problem has an incorrect answer. The student has not shown that he/she has squared a number or that a square root has been taken. Required answers are not in simplest radical form. | The use of exponents and square roots is not clearly found. Student has not shown enough work to show his/her understanding of how to work with these mathematical operations. |

## GRADING SCALE:

| 12: $\mathrm{A}+(100 \%)$ | 7: $\mathrm{C}-(73 \%)$ |
| :--- | :--- |
| 11: A- $(93 \%)$ | 6: $\mathrm{D}+(68 \%)$ |
| 10: $\mathrm{B}+(88 \%)$ | 5: $\mathrm{D}-(65 \%)$ |
| 9: | B- $(83 \%)$ |
| 8: | C+ $(78 \%)$ |

