

**N3CS19****Practice Set 05**

Instructions: Answer each question on loose leaf, quad-ruled (graph paper), headed properly and written in lead-graphite. Remember to fold paper along the center, work exercises in order top to bottom, left column then right column. Staple multiple pages

1) Write the following statement as an exponent; expand it, then evaluate it.  
"Four to the fifth power."

2)  $\frac{2}{3} + \frac{5}{9} =$

3) Evaluate  $\frac{v_f - v_i}{t}$  where  $v_f = 120$ ,  $v_i = 76$ , and  $t = 12$

4) Evaluate  $(a^2 + b^2)$  where  $a = 8$  and  $b = 15$

5) Evaluate  $\sqrt{a^2 + b^2}$  where  $a = 8$  and  $b = 15$

6) If  $x^2 = 361$ , solve for  $x$

7) You go to a swimming pool and jump off the 10m diving board. You dive 8m into the water, or 8m below the surface.

What number family best describes the total distance you traveled from the top of the board to 8m below the surface of the water? Justify your argument with evidence.

8) Evaluate  $8 + 2(4 \div 3 \cdot 2) - 6$