**Instructions:**

* Use the green side of your scantron. Put your matric under student ID.
* No computers. No calculators. No talking.
* Show all work. Zero credit for no work shown.
* Each of these questions will be on the final
* Put this paper in the **second section** of your binder
* Solutions to this test will be on wolfemath by Thursday.
* When you’re done, open your computer, take out your notes, and work on wolfemath

**#17: Simplifying expressions using exponents**

|  |  |
| --- | --- |
| #1 Simplify | Show your work: |
| Correct solution: |

|  |  |
| --- | --- |
| #2 Simplify | Show your work: |
| Correct solution: |

|  |  |
| --- | --- |
| #3 Simplify | Show your work: |
| Correct solution: |

|  |  |
| --- | --- |
| #4 Simplify | Show your work: |
| Correct solution: |

|  |  |
| --- | --- |
| What is ?  What is ?  #5 Simplify the following expression:    *Hint: replace 3(x+2) and 4x(x-2) with what you got above.* | Show your work: |
| Correct solution: |

|  |  |
| --- | --- |
| A rectangular courtyard has a length of  (4x – 5), and a width of (2x – 3).  #6 What is the area of the courtyard?  *(Hint: multiply (4x – 5) times (2x – 3) using the box method.)*  #7 What is the perimeter of the courtyard?  *Hint: add the sides, (4x-5) + (2x-3) + (4x-5) + (2x-3)* | Show your work: |
| Correct solution: |