**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**

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| --- | --- |
| #1 Simplify   1. None of the above | Show your work: |
| Correct solution: |

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

|  |  |
| --- | --- |
| #3 Simplify   1. None of the above | Show your work: |
| Correct solution: |

|  |  |
| --- | --- |
| #4 Simplify   1. None of the above | 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.*   1. None of the above | Show your work: |
| Correct solution: |
| A rectangular courtyard has a length of  (-3x – 5), and a width of (2x – 4).  #6 What is the area of the courtyard?  *(Hint: multiply (-3x – 5) times (2x – 4) using the box method.)*   1. None of the above   #7 What is the perimeter of the courtyard?  *Hint: add the sides, (-3x -5) + (2x – 4) + (-3x – 5) + (2x – 4)*   1. None of the above | Show your work: |
| Correct solution: |

|  |  |
| --- | --- |
| #8 Factor:   1. (x + 4)(x – 3) 2. (x + 4)(x + 3) 3. (x + 12)(x + 1) 4. (x + 12)(x – 1) 5. None of the above | Show your work: |
| Correct solution: |

|  |  |
| --- | --- |
| #9 Factor:   1. (x - 4)(x – 1) 2. (x + 4)(x + 1) 3. (x + 2)(x + 3) 4. (x - 2)(x - 3) 5. None of the above | Show your work: |
| Correct solution: |