Name: _____ Class #: _____

Math 105 with Anderson

Exam 1 Review

The following problems are a subset of the problems we've learned in Lessons 1 - 8. Of course, I recommend revisiting our in-class handouts to solve the problems therein more than once. No matter what resource you use, I encourage you to actively solve problems, find your mistakes, and correct your errors before the actual in class exam.

---

1 - 3 Factor each of the following completely.

1. $4x^2 - 49$
2. $x^2 - 5x - 24$
3. $2x^2 - x - 21$

---

4 - 6 Solve each of the following quadratic equations.

4. $x^2 = 9$
5. $x^2 - 2x = 8$
6. $3x^2 = 7x - 2$

---

7 - 9 If $f(x) = 7 - x - x^2$ Evaluate each of the following.

7. $f(5)$
8. $f(-3)$
9. $f(z)$

---

10 - 12 Graph each of the following functions by first creating a table of values. Be sure to label the axes and label the coordinates of at least 3 of the points.

10. $f(x) = -2x + 3$
11. $y = |x - 3| - 2$
12. $y = x^2 - 4x - 3$

---

13 - 15 Solve each of the following.

13. $|2x + 5| = 13$
14. $2|x - 5| - 3 = -3$
15. $|2x - 3| + 5 = 4$