**Final Exam Review**

Topic Checklist

**1.** Can you solve one, two and multi-step equations? (3.1-3.3)

**2.** Can you solve equations involving variables on both sides? (3.4)

**3.** Can you solve equations involving “no solution” and “all real numbers” as solutions? (3.4)

**4.** Can you set up and solve proportions? (3.5-3.6)

**5.** Can you solve percent problems? (3.7)

**6.** Can you rewrite equations in function form? (3.8)?

**7.** Can you solve literal equations? (3.8)

**8.** Can you solve problems involving the Pythagorean Theorem, including finding missing lengths or deciding if three sides can form a right triangle? (11.4)

**9.** Can you find the slope of a graphed line? (4.4)

**10.** Can you find the slope of a line given two points? (4.4)

**11.** Can you identify different types of slopes? (Positive, negative, zero, undefined) (4.4)

**12.** Can you graph a line using *x* and *y* intercepts? (4.3)

**13.** Can you identify possible combinations of a real-world situation given a graph? (4.3)

**14.** Can you graph a line using slope-intercept form? (4.5)

**15.** Can you evaluate functions using function notation? (4.7)

**16.** Can you write equations in slope-intercept form? (5.1-5.2)

**17.** Can you write equations in slope-intercept form of parallel and perpendicular lines? (5.5)

**18.** Can you decide if two lines are parallel or perpendicular given their equations? (5.5)

**19.** Can you solve inequalities? (6.1-6.3)

**20.** Can you identify if an inequality has “no solution” or “all real numbers?” (6.3)

**21.** Can you graph inequalities in the coordinate plane and identify solutions? (6.7)

**22.** Can you decide if an ordered pair is a solution to a linear system? (7.1)

**23.** Can you solve a system of equations by graphing? (7.1)

**24.** Can you solve a system of equations by substitution? (7.2)

**25.** Can you solve a system of equations by elimination a variable? (7.3-7.4)

**26.** Can you decide if a system of equations has “one solution,” “no solution,” or “infinitely many solutions.” (7.5)

**27.** Can you graph a system of inequalities in the coordinate plane and identify solutions? (7.6)

**28.** Can you simplify expressions involving positive, negative and zero exponents? (8.1-8.3)

**29.** Can you write expressions in scientific notation? (8.4)

**30.** Can you multiply and divide expressions in scientific notation? (8.4)

**31.** Can you add/subtract/multiply polynomials? (9.1-9.3)

**32.** Can you factor polynomials using the GCF? (9.4)

**33.** Can you factor quadratics when *a* = 1? (9.5)

**34.** Can you factor quadratics when *a* is not 1? (9.6)

**35.** Can you factor the difference of two squares? (9.7)

**36.** Can you solve polynomial equations by factoring? (9.4-9.7)

**Accelerated only:**

**37.** Can you factor a 4-term polynomial? (9.8)

**38.** Can you perform operations with radicals? (11.2)

**39.** Can you sketch a quadratic equation based on its characteristics? (10.1)

**40.** Can you graph a quadratic equation by findings its axis of symmetry and vertex? (10.2)

**41.** Can you identify the maximum and minimum of a quadratic equation? (10.2)

**42.** Can you solve a quadratic equation by graphing? (10.3)

**43.** Can you solve a quadratic equation by using the square roots method? (10.4)

**44.** Can you solve a quadratic equation by using the quadratic formula? (10.6)

**45.** Can you identify the number of solutions to a quadratic equation *without solving*? (10.7)