College Algebra

MWF 1pm

KAS 213

Fall 2008

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and by appointment.

Test taking strategies

1. Work each problem completely. Check your answer. On a multiple choice question, check to see if your answer is one of the options.

2. Circle your answer in the question paper. If you are uncertain, mark the question to rework.

3. If you cannot check your work, work the problem again. If possible, use a different method on the second try. If you obtain a different answer on the second try, examine your work for errors.

4. Use correct mathematical notation on short-answer questions. If the question asks for an ordered pair, then $x = 2$ can't be right. We need $(x, y) = (2, 3)$ or $(2, 3)$.

5. After you are done, carefully transfer your answers to the cover page. Allow five minutes to do this. Be careful. Math is fun, but it is not so fun to miss a question because you did not enter the answer correctly on the cover sheet.

Topics

As we move into the course, there some new ideas and techniques that must be mastered. Below is a list of topics covered since the last exam.

1. Translations, reflections and scaling of functions.

2. The vertex of a parabola, completing the square, maximum and minimum of a quadratic function.

3. Composite function, $(f \circ g)(x) = f(g(x))$.

4. Sum, product and quotient of functions, $f + g$, fg, and f/g.

5. One-to-one function.

6. Inverse function, f^{-1}.

7. Domain for sum, product, quotient, inverse and composite function.

8. End behavior of the graph of a polynomial function

9. Zeros of polynomials

10. Local extremes of polynomial functions

11. Long division of polynomials

12. Remainder when dividing by $x - c$

13. Synthetic division.

14. Factor theorem.

15. Rational root theorem.

16. Factoring polynomials using the rational root theorem.

November 14, 2008