Week 3

Monday January 31 *Class 6*:

Solving Linear First-Order DEs. We shall continue our foray into solution techniques for particular kinds of ODEs by solving linear first order DEs.

Reading:

Zill, (Section 2.3)

Homework Set #3: (due in *Class 8*)

Section 2.3: 3, 4, 7*, 9, 15*, 22*, 29, 30, 31, 34* *EXTRA CREDIT 35, 43, 50*

Quiz 2 Due

Wednesday February 2 *Class 7*:

Exact Differentials and Exact DEs. We'll look at more examples of sepcific kinds of differential equations that we can use techniques to produce solutions of.

Reading:

Zill, (Section 2.4)

Homework Set #3: (due in *Class 8*)

Zill, Section 2.4: 5, 10*, 11*, 19, 27*, 30, 32, 38* *EXTRA CREDIT 42, 44*

Friday February 4 *Class 8*:

Substitution Techniques. A number of differential equations can be simplified into very easy DEs to solve by choosing the right substitution. We will look at a number of examples.

Reading:

Zill, (Section 2.5)

Homework Set # 4: (due in *Class 11*)

Zill, Section 2.5: 2, 7, 13*, 16*, 19, 23, 28 *EXTRA CREDIT 35, 38*

Quiz #3