## HW4 Solutions

Here are the solutions that I got when running through the problems.
FALL09 \#4
This was a typo since I forgot to delete this from the old homework that I copied... Sorry about that!
SPRING09 \#9 D
SPRING09 \#12 D
SPRING09 \#15 A
FALL07 \#9 D
SPRING08 \#15
a. Find the $r$ 's and show that they are distinct and do not defer by an integer.

We said that in this case we can find two linearly independent solutions to our equation, one for each $r$.
b. $a_{2}=\frac{1}{6}$

FALL06\#5 B
FALL06\#13 E
FALL06\#14 F
FALL05\#7
The solution to this problem IS NOT ONE OF THE CHOICES!!! You should get:

$$
y=x+\frac{1}{3} x^{3}+\frac{1}{15} x^{5}
$$

FALL05\#11 D

