Math 161   Names _____
Sections 2.5 problems

1. Solve the differential equation: $f''(x) = 4x + 2$

2. Solve the Initial Value Problem: $f''(x) = 3x^2 - 6x + 2$ if $f'(1) = 7$ and $f(0) = 2$.

3. An object moves along a straight line in such a way that it is slowing down with an acceleration of -8 meters per second per second. The object has an initial velocity of 14 meters per second. Find the distance s the object travels during the first 3 seconds. (hint: find s(t) and evaluate s(3) – s(0))