Name: _		
Section:	322 □	323 □

 $Math\ 211\ Quiz\ 8$ Nov 15, 2012

1. (15 pts) Find the general indefinite integral.

$$\mathbf{a.} \int (3\sqrt{t} + \frac{1}{2\sqrt{t}})dt \qquad \qquad \mathbf{b.} \int 4e^{-2x}dx \qquad \qquad \mathbf{c.} \int \frac{2+3y}{4y}dy$$

$$\mathbf{b.} \int 4e^{-2x} dx$$

$$\mathbf{c.} \int \frac{2+3y}{4y} dy$$

2. (5 pts) An object is moving along a straight path that runs north and south. Its velocity, in feet per minute, is given by

$$v(t) = 18 - 8t + 0.3t^2$$

where the north is the positive direction. After ten minutes, is the object north of its starting position, or south? Hint: compute the net change of position.