

MTH 151
Quiz 6
Spring 2010

Show all work in a neat and organized fashion. Clearly indicate your answers.
20 points possible.

1. (4 pts.) Evaluate the indefinite integral.

$$\int (x^4 + x + 3) dx$$

2. (4 pts.) Evaluate the indefinite integral.

$$\int \frac{x}{(x^2 + 5)^8} dx$$

3. (4 pts.) Evaluate the indefinite integral.

$$\int \frac{\sin \sqrt{x}}{\sqrt{x}} dx$$

4. (4 pts.) A particle is moving with the given data. Find the position function of the particle.

$$v(t) = \sin t, \quad s(0) = 2$$

5. (4 pts.) The graph of the velocity function of a particle is shown in the attached figure. Sketch the graph of the position function.