

Name: _____

MA 2320 Quiz 5

1. Compute the arc length for the function $y = \frac{1}{3}(1 - 2x)^{3/2}$ from $t = -1/2$ to $t = 1/2$.
2. Compute the arc length for the function $y = \frac{e^x + e^{-x}}{2}$ from $t = 0$ to $t = \ln(2)$.
3. $\int x e^{2x} dx$
4. $\int x e^{x^2} dx$
5. $\int x^2 \ln(x) dx$
6. $\int x \sin^{-1}(x) dx$
7. Do not do this problem
8. $\int \cos^2(x) \sin^2(x) dx$
9. $\int \sin^3(x) \cos^{-1/2}(x) dx$
10. $\int \frac{1}{\sqrt{1+x^2}} + \frac{x}{\sqrt{1+x^2}} dx$