MAC 2311 Hybrid Calculus I (S)

Name Quiz#7 (4.9) Take-Home. Show all your work.

1. Find *f* if $f^{'}=2x(x^{2}+2)^{2}, f\left(1\right)=10$

Answer: ­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2) Find *f* if $f^{'}\left(x\right)=2\sqrt{x}-\frac{3}{2\sqrt{x}} $

Answer: ­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3) Find *f* if $f^{''}\left(x\right)=\sin(\left(x\right))-cos⁡(x)$ if $f^{'}\left(0\right)=2; f\left(0\right)=3$

Answer: ­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4) Find the position s(t) given the velocity function is $v\left(t\right)=2/\sqrt{t}$ with the initial condition s(1)=0.

Answer: ­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_