Week 8 Quiz MAT 2601 (Homework)

Question 1

$$C(x) = 3x^2 + 5x + 60$$

Question 2.

$$C(x) = 180x + 0.1x^{\frac{3}{2}} + 26,900$$

Question 3.

$$C(y) = 0.5y + 0.4\sqrt{y} + 7$$

Question 4.

$$C(y) = 0.3y + 2e^{-0.5y} + 5.5$$

Question 5

$$C(y) = 0.8y - \frac{2}{3}e^{-1.5y} + \frac{20}{3}$$

Question 6.

$$y = \frac{1}{2}e^{(x^2+3)} + C \quad \text{OR} \quad y = \frac{e^{(x^2+3)}}{2} + C.$$

Question 7

$$3y^3 = x^2 - x + c.$$

Question 8

$$\frac{y^2}{2} = \frac{x^4}{4} + C \quad \text{OR} \quad 2y^2 = x^4 + c.$$

Question 9

$$\frac{y^2}{2} + 5y = \frac{x^3}{3} + \frac{x^2}{2} + C.$$

OR

$$3y^2 + 30y = 2x^3 + 3x^2 + C$$

Question 10.

$$\frac{1}{6} e^{6y} = \frac{x^2}{2} - \frac{3}{x} - \frac{10}{3}.$$