MA 341 – Review Assignment 7 (answer key)

Question 1

$$x = -9, x = 0$$

Question 2

$$\begin{pmatrix} 1 & -1 \\ -1 & 1.2 \end{pmatrix}$$

Question 3

$$\begin{pmatrix} 1 & -2.5 \\ -1 & 3 \end{pmatrix}$$

Question 4

- (a) PR
- (b) \widetilde{RS}
- (c) $Q\overline{P}$
- (d) RQ

Question 5

$$|a| = 10.6$$

$$\mathbf{a} + \mathbf{b} = 8\mathbf{i} - 3\mathbf{j}$$

$$\mathbf{a} - \mathbf{b} = 6\mathbf{i} - 13\mathbf{j}$$

$$2\mathbf{a} = 14\mathbf{i} - 16\mathbf{j}$$

$$3\mathbf{a} + 4\mathbf{b} = 25\mathbf{i} - 4\mathbf{j}$$

Question 6

$$r = -9, r = 8$$

Question 7

(a)
$$y' = 1 - 2xy$$

Question 8

$$y = n\pi$$

Question 9

$$y(1) = 0.7824$$

Question 10

$$y = \pm \sqrt[3]{0.111e^{9x} + C}$$