

MA 341 – Review Assignment 2 (answer key)

Question 1

- (a) 48.7 ft/s; 43.5 ft/s; 38 ft/s
- (b) 28.1 ft/s

Question 2

1

Question 3

Yes

Question 4

$$y = x + 4$$

Question 5

$$G'(a) = (1 + 2a)^{-2}$$

$$y = 4x + \frac{1}{2}$$

Question 6

- (a) -2, 0, 5
- (b) -2, -1, 0, 2, 4, 5

Question 7

- (a) (1, 6), (8, ∞)
- (b) (0, 1), (6, 8)
- (c) 6
- (d) 1, 8
- (e) (0, 2), (3, 5), (7, ∞)
- (f) (2, 3), (5, 7)
- (g) 2, 3, 5, 7

Question 8

$$-\frac{1}{3}\sin(6-t^3)+C$$

Question 9

$$\frac{1}{6}x^6 \ln x - \frac{1}{36}x^6 + C$$

Question 10

0.077

Question 11

$$y'(x) = (-2x)\left(5^{(1-x^2)}\right)(\ln 5)$$