

3.5.3 Solutions to 3.4 Homework

GCSE Mathematics Functions I

Answer 1

(i) $\frac{1}{2}$

(ii) $\frac{1}{5}$

[4 marks]

Answer 2

(i) 6

(ii) 6

[4 marks]

Answer 3

(i) 3

(ii) 4

(iii) 12

(iv) 16

(v) 10

(vi) 4

[6 marks]

Answer 4

(i) 4

(ii) 169

(iii) -81

(iv) 108

(v) $49x - 32$

(vi) $49x^2 - 14x + 1$

[6 marks]

Answer 5

(i) 25

(ii) 55

(iii) 1600

(iv) -50

(v) 256

(vi) 7

[3 marks]

(vii) $2500 - 100x + x^2$

[2 marks]

(viii)

The exact answer will be given by,

$$x^2 = 50 - x$$

$$x^2 + x - 50 = 0$$

$$x = \frac{-1 \pm \sqrt{201}}{2}$$

$$x = 6.5887, 7.5887$$

[3 marks]