5. (a) Show how the following sequence progresses and find the nth term. (2 marks)

n = 1 2 3 4 5 6

t = 0 3 6 9

(b) Find the 50th term of the equation. (1 mark)

(c) How do you know that the number 242 is not in the sequence? (1 mark)

1. Express each of the following recurring decimals as a fraction in its lowest terms. (3 marks)

● 6aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa aaa●aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa●aaaaaaaaaaaaaaaaa●aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa

1. 0.7 (b) 0.17 (c) 0.372
2. (a) Calculate the gradient of the line that passes through the points (2,7) and (4,5). (1 mark)

(b) Find the gradient and the Y intercept of the line with the following equations. (3 marks)

1. X = Y/4 + 2 (ii) 4x + y = 8 (iii) y = 4x – 8 (iv) Y/x = 4
2. Find the equation in the form y = mx + c: y intercept of –2 and gradient of 3/9 . (1 mark)
3. Copy and complete the Venn diagram to show this information:

n(**E**) = 23, n (A ᑌ B) = 20, n(A ᑎ B’) = 9, n(A) = 12. (2 marks)

