

Mathematics Holiday Assignment

Grade 11

Instruction: Show your working for question 1,2,6 ,7 and 8

Marks: 30

1. Factorise completely

a) $ad + cd + ae + ce$

b) $3x^2 - 4x - 7$

2. For the sequence 11 , 14 , 17, 20,..., find the

(a) 15th term

(b) Sum of the 20 terms

3. Describe the following terms

(c) Computer

(d) Flowchart

(e) Pseudocode

(f) Algorithm

4. Differentiate between input and output devices and give two examples of each.

5 . Write at least 3 guidelines for drawing a flowchart.

6. A straight line passing through A(3 ,2) and B (5, y) has gradient -2. Find the value of y .

7. Draw the Venn diagram and Shade $(A \cup B)' \cap C'$

8. Solve the equation $3x^2 - x - 5 = 0$, giving your answers correct to 2 decimal places