

Total marks – 120
Attempt Questions 1–10
All questions are of equal value

Answer each question in a SEPARATE writing booklet. Extra writing booklets are available.

	Marks
Question 1 (12 marks) Use a SEPARATE writing booklet.	
(a) Evaluate, correct to three significant figures,	2
$\sqrt{\frac{3^2 + 12^2}{231 - 12^2}}$	
(b) Solve $ x + 3 < 2$. Graph your solution on a number line.	2
(c) Solve $x^2 - 2x - 8 = 0$.	2
(d) Find a primitive of $3 + \frac{1}{x}$.	2
(e) Simplify $\frac{x}{x^2 - 4} + \frac{2}{x - 2}$.	2
(f) The cost of a video recorder is \$979. This includes a 10% tax on the original price. Calculate the original price of the video recorder.	2