

Revision Sheet

IGCSE Mathematics · Unit 2 Algebra and graphs

21 vocabulary items · 31 marks of exam questions (6 questions)

Part 1 · Vocabulary review answer key. Section A wants the exact English spelling.

Question	Answer	Marks
1	term	1
2	expression	1
3	expand	1
4	factorise	1
5	equation	1
6	simultaneous equations	1
7	inequality	1
8	number line	1
9	region	1
10	sequence	1
11	term-to-term rule	1
12	constant	1
13	gradient	1
14	travel graph	1
15	deceleration	1
16	distance	1
17	table of values	1
18	turning point	1
19	tangent	1
20	stationary point	1
21	function	1

22(a)	50
22(b)	$p = \frac{3X}{w^2}$ or $p = 3Xw^{-2}$ final answer

23(a)	14
23(b)	40
23(c)	11 50
23(d)	Ruled line from (9 40, 0) to (10 20, 14)

24(a)	$5a - b$ final answer
24(b)(i)	$3(2x + 5y)$ final answer
24(b)(ii)	$xy(x - 5)$ final answer

25(a)	tangent ruled at $x = 3$	1	
25(b)	4.8 to 5.8	2	dep on a close attempt at a tangent M1 for $\frac{\text{rise}}{\text{run}}$ also dep on close attempt a

26	$4x^2 + 3x - 85 [= 0]$ or $16y^2 - 113y + 7 [= 0]$ oe simplified	M2	M1 for $4(x^2 - 18) + 3x = 13$ or $x^2 - 18 =$ or $y = \left(\frac{13-4y}{3}\right)^2 - 18$ oe or better
	correct method to solve <i>their</i> quadratic equation e.g. factors, quadratic formula, completing the square	M1	$\frac{-3 \pm \sqrt{3^2 - 4 \times 4 \times -85}}{2 \times 4}$ oe, $(4x - 17)(x + :)$ $\frac{-(-113) \pm \sqrt{(-113)^2 - 4 \times 16 \times 7}}{2 \times 16}$ oe, $(16y - 1)(y - 7)$
	$x = -5$ $y = 7$ $x = \frac{17}{4}$ oe $y = \frac{1}{16}$ oe	B2	B1 for one correct pair or two correct x or two correct y values If B0 scored and at least 2 method marks SC1 for correct substitution of both of the values or their y values into $4y + 3x = 13$ or $x^2 - 18$

27(a)	$-4(-1)^3 - 9(-1)^2 + 5$ or better
	$= 0$ [so stationary point]
27(b)(i)	18
27(b)(ii)	1 and -1