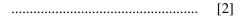
1	Factorise completely.	
	1 + x - y - xy	
		[0]
		[2]
		[Total: 2]
2	Factorise completely.	
	$2x^3 - 18xy^2$	
	•	
		[3]
		[Total: 3]
3	Expand and simplify.	
	$(2x+3)(x-2)^2$	
		[3]
		[Total: 3]
4	Endering considerate	[20
4	Factorise completely. $14x^3 + 49x$	
		[2]
		[Total: 2]

5	Factorise completely. $1 - q - a + aq$	
		[2]
		[Total: 2]
6	Factorise completely.	
	$5x^2 - 20y^2$	
		[3]
-	F 4 1 14 1	[Total: 3]
7	Factorise completely.	
	mt - n - m + nt	
		[2]
		[Total: 2]

8	Factorise	completely.
U	1 actorisc	completely.

$$2m + 3p - 8km - 12kp$$



[Total: 2]

9 (a) Show that
$$y = (x + 1)(3 - x)(3 + x)$$
 can be written as $y = 9 + 9x - x^2 - x^3$.

[2]

9	(b)	Calculate the x-values of the turning points of $y = 9 + 9x - x^2 - x$ Show all your working and give your answers correct to 2 decimal p	olaces.	
		x —	v – [77	1
	(c)	$x = \dots,$		J
	(C)	The equation $9 + 9x - x^2 - x^3 = k$ has one solution only when k where a and b are integers.	< a and when $k > b$,	
		Find the maximum value of a and the minimum value of b .		
		$a = \dots$		
		<i>b</i> =	[3]]
			[Total: 12	.]
				_

10	Expand and simplify. $(2x-3)(x+6)(x-4)$	
		[3]
		[Total: 3]
11	Simplify. $a - 2b - 3a + 7b$	
		[2]
		[2]
12	Expand and simplify. $A(y_1, y_2) = (2y_1)^{y_1}$	
	4(x-5)-(3-2x)	
		[2]
		[Total: 2]
13	Factorise completely.	
	$12a^3 - 21a$	
		[2]

[Total: 2]

14	Expand and simplify. $(x-3)(x+1)(3x-4)$	
		[3]
		[Total: 3]
15	Factorise. $4x^2 - y^4$	
		[2]
		[Total: 2]
16	Factorise. $5am + 10ap - bm - 2bp$	
		[2]
		[Total: 2]

17	$(x+a)^2 = x^2 + 22x + b$	
	Find the value of a and the value of b .	
		<i>a</i> =
		$b = \dots [2]$
		[Total: 2]
18	Expand and simplify.	
	(3x - 5y) (2x + y)	
		[2]
		[Total: 2]
19	Simplify.	
	3a - 5b - a + 2b	
		[2]
		[Total: 2]
20	Simplify. $5g - 3h - 7g + 6h$	
		[2]
		[Total: 2]
		[· · · · · ·]

21	Factorise completely.	
	$14xy - 7y^2$	
		[2]
		[2]
		[Total: 2]
22	Factorise.	
	$x^2 - 8xy$	
		r13
		[1]
		[Total: 1]
23	Simplify.	
	3x - 4x + 7x	
		[1]
		[Total: 1]
		[Total: 1]
24	Simplify. $3(2a-b)-b$	
	3 (24 0) 0	
		[2]
		[Total: 2]
25	Factorise completely.	
	18px - 27p	
		[2]
		[Total: 2]

26	Simplify.	
	6(2x+1) - 5(x-2)	
		ro.
		[2]
		[Total: 2]
27	Renuka's teacher asks her to factorise completely $8x^2 - 12x$. Renuka writes $2x(4x - 6)$ as her answer.	
	Explain why she does not score full marks and give the correct answer.	
	Reason	
	Correct answer	[2]
		[Total: 2]
28	Simplify.	
	5f + 7g - 8f + 2g	
		[2]
		[Total: 2]