

1	(a)	(i)	One from 22, 24, 26, 28	A1									
		(ii)	21, 23, 24 or 21, 22, 25	A1									
	(b)	(i)	27	A1									
		(ii)	27 is equal to 3 cubed	A1									
	(c)	(i)	22	A1									
		(ii)	22 is equal to $11 \times 2$	A1	6 marks								
2	(a)	(i)	Perimeter = $4 + 3 + 4 + 3$ 14cm	M1 A1									
		(ii)	Area = $4\text{cm} \times 3\text{cm}$ $12\text{cm}^2$	M1 A1									
	(b)		6/12, 50%	M1A1									
	(c)		two squares shaded	A1									
	(d)		3/9 1/3	M1 A1cao	9 marks								
3	(a)		3460	A1									
	(b)	(i)	$3460 + 570$ 4030	M1 A1									
		(ii)	1 hour + 15 min + 13 min 1 hour 28 min	M1 A1									
		(iii)	36000	A1									
	(c)		$570 \div 57$ 10	M1 A1	8 marks								
4	(a)	(i)	Rectangle, Square	A1 A1									
		(ii)	Cuboid	A1									
	(b)		$2 \times 1 \times 1$ $2\text{cm}^3$	M1 A1									
	(c)		Horizontal line of symmetry drawn <b>only</b>	A1	6 marks								
5	(a)		1    2    3    4    4    5    6    6    7    10    11    11    12    14    15	A1									
	(b)		6 metres	A1									
	(c)		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Height in metres</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>1 - 5</td> <td>6</td> </tr> <tr> <td>6 - 10</td> <td>4</td> </tr> <tr> <td>11 - 15</td> <td>5</td> </tr> </tbody> </table>	Height in metres	Frequency	1 - 5	6	6 - 10	4	11 - 15	5		
Height in metres	Frequency												
1 - 5	6												
6 - 10	4												
11 - 15	5												
			deduct one mark for each mistake	A3	5 marks								
6	(a)	(4, 4)		A1									
	(b)	(i)	(-4, 4) correctly marked	A1									
		(ii)	8cm or units	A1									
	(c)		(0, 4)	A1									
	(d)	(i)	6.1 cm (or rounding to this) or units	A1 ft									
		(ii)	$6.1 \times 50$ 305m [½ size:]	<b>M1</b> A1 ft	7 marks								
7	(a)		$30 \times £3 + 60 \times £3.50$ £300	M1 A1									
	(b)		90 × £1.10 £99	M1 A1	4 marks								

8	(a)	$9 + 5 + 3 + 5 + 10 + 7 + 5 + 6 + 5 + 3 = 58$	M1		
		$58 \div 10$	M1		
		5.8	A1		
	(b)	5	A1	4 marks	
9	(a)	$15x$	A1		
	(b)	(i) $x = 4$	A1		
		(ii) $3x + 14 = 17$	M1		
		$x = 1$	A1		
	(c)	17	A1	5 marks	
10	(a)	27, 39, 45	A1 for 1 out of 3	A2	
	(b)	(i) 8	A1		
		(ii) 100	A1		
		(iii) 8	A1	5 marks	
11	(a)	(i) Isosceles	A1		
		(ii) Equilateral	A1		
	(b)	(i) 1	A1		
		(ii) 3	A1	4 marks	
12	(a)	$1500 \times 7$	M1		
		10500	A1		
	(b)	Area of base = $50\text{cm} \times 20\text{cm}$	M1		
		$1000\text{cm}^2$	M1		
		Volume = Base area $\times$ Height	M1		
		$\text{Height} = 3000\text{cm}^3 \div 1000\text{cm}^2$	M1		
		3cm	A1	7 marks	
13	(a)	$1/20$	A1		
	(b)	$1 - 1/20$	M1		
		$19/20$	A1	3 marks	
14	(a)	$7r + 5s - 3s$	M1		
		$7r + 2s$	A1		
	(b)	$x(x+7)$	A1		
	(c)	(i) $3x + 5 = 9.5$	M1		
		$3x = 4.5$	M1		
		$x = 1.5$	A1		
		(ii) $18 + 3x = 9x$	M1		
		$18 = 6x$	M1		
		$x = 3$	A1	9 marks	
15		$900 \div 100$	M1		
		9	A1	2 marks	
16	(a)	50km	A1		
	(b)	(i) 3 hours	A1		
		(ii) 8 hours	A1		
		(iii) 25km per hour	A1		
		(iv) C to D	A1	5 marks	
17	(a)	1000m	[½] $3.3\text{cm} \rightarrow \times 200 = 660\text{m}$	A1	
	(b)	$047^\circ \pm 1^\circ$	A1	2 marks	

18	(a)	(i)	1200g	A1
		(ii)	1200g	A1
		(iii)	24 eggs	A1
		(iv)	4 pints	A1
	(b)	(i)	$43 - 3 - 7 - 7 - 7 - 3 = 16$	M1
			$16\text{cm} \div 4 = 4\text{cm}$	A1
		(ii)	$4 \div 2 = 2$	M1
			$2^2 \times 3.14$	M1
			$12.56\text{cm}^2$	A1      9 marks

**Total: 100 marks**