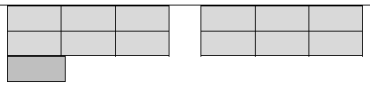
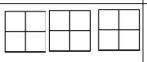
1	(a)		40	1	B1	
	(b)	e.g. 9 × 4 or 68 – 32 oe		2	M1	May be seen by side of pictogram.
			36		A1	
	(c)		2 rectangles of 6 sections and 1 small section	1	B1	oe
						Total 4 marks

2	(a)		100	1	B1	
	(b)		1 ¾ pictures	1	B1	
	(c)	$2\frac{1}{2}+3\frac{1}{4}+5+4\frac{1}{4}+'1\frac{3}{4}'(=16\frac{3}{4})$ oe **or** $2\frac{1}{2}\times20+3\frac{1}{4}\times20+5\times20+4\frac{1}{4}\times20+35\ (=335)$ **or** 50 + 65 + 100 + 85 + 35 (= 335)		3	M1	ft from (b) for adding up the number of squares or finding the total number of books – allow one error or omission
		500 – '$16\frac{3}{4}$' × 20 oe **or** 500 – '335'			M1	ft
			165		A1	
						Total 5 marks

3	eg 20 ÷ 2.5 (= 8) **or** 32 ÷ 4 (= 8) **or** 20 ÷ 10 (= 2) **or** 32 ÷ 16 (= 2)			M1	for a method to find a key
		8		A1	key completed correctly
	eg 24 ÷ [their 8] **or** 14 ÷ [their 8] **or** 24 ÷ [their 2] **or** 14 ÷ [their 2]			M1	complete method to find the picture for Miss Okoye **or** Dr Syed
		Miss Okoye  Dr Syed 	4	A1	
					Total 4 marks

4	(a)		12	1	B1	
	(b)	'12' × 2.5	30	1	B1ft	Ft their 12
	(c)	One and a quarter rectangles	One and a quarter rectangles drawn oe	1	B1	ft their 12
	(d)	36 × 5000 (= 180 000) or 200 000 ÷ 5000 (=40)		2	M1	
			No and 180 000		A1	for no oe **and** 180 000 **or** no oe **and** 40 **or** no oe **and** 20 000 short or 20 000 **and** short/off
						Total 5 marks

5	[small square =] 2 **or** [large square =] 8		4	B1	may be seen in a square on the pictogram or in working or implied by correct working
	eg 16 × "2" (= 32) **or** 4 × "8" (= 32) **or** 6 × "2" (= 12) **or** 1.5 × "8" (= 12) **or** 3 × "2" (= 6) **or** 0.75 × "8" (= 6) **or** 13 × "2" (= 26) **or** 3.25 × "8" (= 26) **or** for showing a method of adding the number of large squares (eg 2.5 + 4 + 1.5 + 0.75 + 3.25)(=12) *(at least 3 correct – may omit Monday)* **or** for showing a method of adding the number of small squares (10 + 16 + 6 + 3 + 13)(=48) *(at least 3 correct – may omit Monday)*			M1	for method to work out number of parcels for Tuesday or Wednesday or Thursday or Friday (may be written by the side of the pictogram). Allow use of *their* 2 or 8 **or** for a method to count the number of large squares or the number of small squares
	eg 20 + "32" + "12" + "6" + "26" **or** "12" × "8" oe eg "9.5" × "8" + 20 **or** "48" × "2" oe eg "38" × "2" + 20			M1	for a complete method to find the total number of parcels – a sum of 5 numbers with at least 3 correct. Allow use of *their* 2 or 8 **or** multiplying number of large squares by 8 **or** multiplying number of small squares by 2. Allow use of *their* 2 or 8
	Working not required, so correct answer scores full marks (unless from obvious incorrect working)	96		A1	cao
					Total 4 marks

6	(a)		Wednesday	1	B1	
	(b)	4 : 2.5 or 16 : 10 oe		2	M1	
			8 : 5		A1	M1 A0 for 5 : 8
	(c)		3.5 "envelopes"	1	B1	Accept  for half an envelope
	(d)	$\frac{6}{14}$		2	M1	
			$\frac{3}{7}$		A1	
	(e)	eg Heights of bars (cms): 7, 5.5, 3 or heights of 3.5, 2.75, 1.5 cms	bars at correct heights and correct scale	2	B2	B2 for all bars at correct heights with a correct scale (at least one value, not contradicted. 0 implied) If not B2 then B1 for 1 error on heights **or** no scale, but with heights in correct proportion eg 7, 5.5, 3 cms
						Total 8 marks

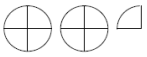
7	(a)		18	1	B1	
	(b)(i)	eg 66 − 15 − 9 − 3 − "18" **or** 66 − (7.5 × "6") **or** 66 − 45		2	M1ft	ft their 18 from part (a)
			21		A1ft	ft their 18 from part (a) eg 66 − 15 − 9 − 3 − their answer to part (a)
	(ii)		$3\frac{1}{2}$ diagrams drawn	1	B1ft	follow through their 21 from (b)(i)
						Total 4 marks

8	(a)		14	1	B1	
	(b)		Cruise  Skiing	2	B1 B1	correct symbol for Cruise correct symbols for Skiing
	(c)			2	M1	$\frac{7}{a}$ where $a \geq 7$ **or** $\frac{b}{40}$ where $b \leq 40$
			$\frac{7}{40}$		A1	oe
						Total 5 marks

9	(a)		20	1	B1	
	(b)	32, "20", 18, 22		2	M1ft	for at least 3 correct values **or** clear use of multiples of 8
			92		A1ft	72 + "answer to (a)"
	(c)		3 and ¼ symbols	1	B1	
						Total 4 marks

10	(a)		USA	1	B1	
	(b)		Pictogram completed with 1 and a half symbols	1	B1	
	(c)	11 + 7 oe eg (2.75 + 1.75) × 4		2	M1	For two numbers added together, one of which is correct
		Correct answer scores full marks (unless from obvious incorrect working)	18		A1	
						Total 4 marks

11	eg (8 + 8) + (8 + 4) + (8 + 8 + 6) + (8 + 8 + 2) (= 68) **or** 16 + 12 + 22 + 18 (= 68) **or** 8.5 × 8 (= 68)		4	M2 (M1	for a method to find the total cars sold in April with at least 3 out of 4 correct and intention to add **or** sight of 68 for a method to find the totals for each employee with at least 3 out of 4 correct **OR** method to find the totals for 2 employees and intention to add)
	eg 60 × 0.15 (= 9) oe **or** 60 × 1.15 (= 69) oe			M1	(indep) for a method to increase 60 by 15% or 15% of 60 or sight of 69 or 9 Allow $\frac{"68"}{1.15}(=59.1...)$
	Working required	68 and 69 or 68 and 1 more needed		A1	Suitable conclusion e.g 59.1 v 60
					Total 4 marks

12	(a)		28	1	B1	
	(b)			1	B1	(quarter circle can be any quadrant)
	(c)	"28" + 10 + 14 + 20 + "18" (= 90) oe eg 8 × 11.25 (= 90) or "56" + 20 + 28 + 40 + "36" (= 180) oe		2	M1	ft their (a) and their (b) from diag 3 correct figures out of 5 seen (no need to add) allow figures doubled; 3 out of 5 seen (figures may be seen in or by table)
		Correct answer scores full marks (unless from obvious incorrect working)	180		A1	cao SCB1 if no other marks awarded for 360 or 90
						Total 4 marks