June 2011

1380_1F					
Question		**Working**	**Answer**	**Mark**	**Notes**
1	(a)		16	1	B1 cao
	(b)		France	1	B1 cao
	(c)		Italy	1	B1 cao
2	(a)		one thousand three hundred (and) forty five	1	B1 cao
	(b)		12 750	1	B1 cao
	(c)		4700	1	B1 cao
3	(a)(i)		rectangle	2	B1 for rectangle (accept parallelogram)
	(ii)		kite		B1 cao
	(b)		parallelogram	1	B1 for a parallelogram or rectangle or square or rhombus (parallel sides need not be marked)

1380_1F					
Question		**Working**	**Answer**	**Mark**	**Notes**
4	(a)	4 × 6.20	24.80	2	M1 for 4 × 6.2 or 6.2 + 6.2 + 6.2 + 6.2 oe A1 for 24.8(0) (accept 24.80p)
	(b)	15.50 ÷ 6.20	2.5	2	M1 for 15.5 ÷ 6.2 or 15.5 – 6. 2 – 6. 2 or 6.2 + 6.2 + '3.1' A1 for 2.5 or $2\frac{1}{2}$ or 2 h 30(m) (condone 2:30 but not 2.30)
5	(a)(i)		20	2	B1 cao
	(ii)		12		B1 cao
	(b)		16	1	B1 cao
6	(a)		Blue = 6 Green = 9	2	B1 for 6 B1 for 9
	(b)		bar of height 10 bar of height 5	2	B1 for bar of height 10 B1 for bar of height 4.2 – 5.8

Question		Working	Answ1er	Mark	Notes
7	(a)		$3\dfrac{1}{3}$	1	B1 cao
	(b)	3/5 = 9/15 2/3 = 10/15 OR 3/5 = 0.6 or 60% 2/3 = 0.66(6..) or 66(.6..)% OR e.g. total = 60 3/5 × 60 = 36 2/3 × 60 = 40	2/3 + reason	3	M1 for an attempt to convert both fractions to a common denominator, one of which should be correct, e.g. $\dfrac{9}{15}$ or $\dfrac{10}{15}$ A1 for both correct A1 for both correct and 2/3 oe correctly identified OR M1 for an attempt to convert both fractions to decimals or percentages, e.g. 0.6 or 0.66(6….) OR 60(%) or 66(.6…)(%), one of which should be correct A1 for both correct A1 for both correct and 2/3 oe correctly identified OR M1 for 3/5×N and 2/3×N, where N = their total A1 for both correct A1 for both correct and 2/3 oe correctly identified
	(c)	$\dfrac{4\times3}{5\times8}=\dfrac{12}{40}$	$\dfrac{3}{10}$	2	M1 for $\dfrac{4\times3}{5\times8}$ or e.g. $\dfrac{32\times15}{40\times40}$ or $\dfrac{12}{40}$ oe or $\dfrac{1}{5}\times\dfrac{3}{2}$ A1 cao

1380_1F					
Question		**Working**	**Answer**	**Mark**	**Notes**
8	(a)		6	1	B1 cao
	(b)		14.1	2	B1 for identifying an estimate in range $13 \leq n \leq 15$, accept e.g. 14^2 (=196) or $\sqrt{169} = 13$ B1 for a correct reason or supportive working, e.g. $14^2 =196$ or $13^2 =169$ so bigger than 13
9	(i)		parallel lines marked	3	B1 for parallel lines marked with arrows
	(ii)		obtuse angle marked		B1 for obtuse angle marked O
	(iii)		42		B1 for 40 – 44
10	(a)(i)		27	2	B1 cao
	(ii)		add 5 each time		B1 for a correct reason, e.g. add 5 (each time) or numbers end (2,) 7, 2, 7 (accept goes up in 5s)
	(b)		52	1	B1 cao
	(c)		reason	1	B1 for a correct explanation, e.g. the hundredth term is 502 or terms end with 2 or 7 or no 4s in list

Question	Working	Answer	Mark	Notes
11 (a)		153	1	B1 cao
(b)	354 ×26 7080 2124 9204	9204	3	M1 for a complete method with relative place value correct- condone one multiplication error addition not necessary OR M1 for complete grid. Condone one multiplication error, addition not necessary OR M1 for sight of complete partitioning method. Condone one multiplication error. Final addition not necessary.

	300	**50**	**4**	
20	6000	1000	80	
6	1800	300	24	
	7800	1300	104	

7800 + 1300 + 104 = 9204

20×354=7080
6×354=2124

7080 + 2124 = 9204

M1 (dep) for addition of appropriate elements of the calculation
A1 cao

(SC B1 for attempting to add 26 lots of 354)

1380_1F					
Question		Working	Answer	Mark	Notes
12	(a)		square based pyramid	1	B1 for (square based) pyramid
	(b)		5	1	B1 cao
	(c)		8	1	B1 cao
13	(a)		cross at 0	1	B1 cao
	(b)		cross at 1	1	B1 cao
	(c)		cross at 1/6	1	B1 for cross in guidelines (overlay)
14			(Output =) 20 (Input =) 15	2	B1 for 20 B1 for 15
15	(a)	$8.2 \times 10000 \div 100$	820	2	M1 for 8.2 (±0.2) × 10000 ÷100 oe A1 for 800 – 840 (SC B1 for 8.2(±0.2) × 10^n, where $n \geq 1$, e.g. 82)
	(b)		130	1	B1 for 128 – 132
16	(a)		11 49	1	B1 cao
	(b)		14	1	B1 cao
	(c)		10 03	1	B1 cao

Question		Working	Answer	Mark	Notes
17		$$\dfrac{7\times20}{0.5}$$	280	3	M1 for any two of 7, 20 and 0.5 seen or 140 or 40 or 14 M1 for 14×20 or 140÷0.5 or 140×2 or 7×40 or 7.2×40 or 144÷0.5 A1 for 280 – 300
18	(a)	<table><tr><td>**3**</td><td>**3**</td><td>(19)</td><td>(25)</td></tr><tr><td>(4)</td><td>(5)</td><td>**16**</td><td>**25**</td></tr><tr><td>(7)</td><td>**8**</td><td>**35**</td><td>(50)</td></tr></table>	Table	3	B3 for all 6 correct (B2 for 4 or 5 correct) (B1 for 2 or 3 correct)
	(b)(i)		7/50	1	B1 for 7/50 oe
	(ii)		9/50	1	B1 for 9/50 oe
19		50×160=8000 35/100×8000=2800 8000+2800=10800 10800/400	27	4	M1 for 50×160 (=8000) M1 for 35÷100×'50×160' (=2800) oe, e.g. 800+800+800+400 M1 (dep on previous Ms) for 10800÷400 oe or ('8000'+'2800') ÷ 400 oe A1 cao M1 for $\frac{35}{100}\times 160$ oe, e.g. 16+16+16+8 (=56) M1 for (160+'56') × 50 (=10800) M1(dep on previous Ms) for '10800' ÷ 400 oe A1 cao

1380_1F					
Question		**Working**	**Answer**	**Mark**	**Notes**
20		184×5/8=115 120×8/5=192	Car B	2	M1 for 184 × 5 ÷ 8 (=115) or 120 × 8 ÷ 5 (=192) oe A1 for Car B and 115 or 192 OR M1 for 184÷8 (=23) and 120÷5 (=24) A1 for Car B and 23 and 24 OR M1 for 184×5 (=920) and 120×8 (=960) A1 for Car B and 920 and 960 SC B1 for sight of a correct conversion factor 5miles = 8km or 1mile = 1.6km oe
21	(a)	$2 \times 5 + 3 \times -1$	7	2	M1 for 2×5 and 3×-1 or 10 and -3 seen A1 cao
	(b)	$3 \times -4 \times -4$	48	2	M1 for $3 \times (-4)^2$ or $3 \times -4 \times -4$ or 3×16 or 3×-16 or -12×-4 or -48 A1 cao

Question	Working	Answer	Mark	Notes
22	$1 - (3/8 + 40/100)$ $= 1 - (300/800 + 320/800)$ $= 1 - 620/800$ $= 180/800$ OR $1 - 0.4 - 0.375 \ (=0.225)$ OR e.g. $N=80$ $\frac{3}{8} \times 80 (= 30) \qquad \frac{40}{100} \times 80 (= 32)$ $80 - 30 - 32 = 18$ ans $= \frac{18}{80}$	9/40	3	M1 for $3 \div 8$ or 0.375 or 37.5(%) or $\frac{40}{100}$ oe or 0.4 seen M1 (dep) for $1 - \frac{3}{8} - '\frac{40}{100}'$ oe or $100(\%) - 40(\%) - '37.5'(\%)$ or $1 - '0.375' - '0.4'$ A1 for $\frac{9}{40}$ oe or 22.5% or 0.225 OR M1 for $\frac{3}{8} \times N$ and $\frac{40}{100} \times N$, where N = their total M1 (dep) for $N - \frac{3}{8} \times N - \frac{40}{100} \times N$ A1 for $\frac{9}{40}$ oe or 22.5% or 0.225

Question		Working	Answer	Mark	Notes
23	(a)		reflection	2	B2 for vertices of shape plotted at (–3, 2), (–3, 3),(–5, 3),(–6, 2.5), (–5, 2) (B1 for a reflection in any vertical or horizontal line)
	(b)		translation, $\begin{pmatrix} -6 \\ -1 \end{pmatrix}$	2	B1 for translation B1 for 6 left and 1 down OR $\begin{pmatrix} -6 \\ -1 \end{pmatrix}$ Note: B0 if more than one transformation given
24	(a)		positive correlation	1	B1 for positive correlation or e.g. as the number of pages increases the time taken increase or the longer the book the more time it takes to read oe
	(b)		7.5	2	B2 for 7 – 8 (B1 for 6 – 9)
25	(i)		55	1	B1 cao
	(ii)		corresponding angles	1	B1 for corresponding (angles), accept F angles.
26	(a)		$x^2 + 2x$	2	M1 for $x \times x + x \times 2$ or two term expression including $x \times x (= x^2)$ or $x \times 2(= 2x)$ A1 cao
	(b)		$5(3x - 2)$	2	B2 cao (B1 for $5(3x + a)$ or $5(bx - 2)$), where $a \neq 0$ and $b \neq 0$
	(c)	$x^2 + 3x - 4x - 12$	$x^2 - x - 12$	2	M1 for all 4 correct terms ignore signs or 3 out of 4 terms correct from x^2, $3x$, $-4x$, -12 A1 for $x^2 - x - 12$ (accept $x^2 - 1x - 12$)

1380_1F

Question	Working	Answer	Mark	Notes
27	P: T: B = 1: 3: 6 54÷10 × 6 OR e.g. T=3P B=2T So, B=2(3P)=6P P+T+B=P+3P+6P=10P P = 54÷10 = £5.40 B = 6×£5.40	32.40	3	M1 for 1 : 3 : 6 or any three numbers in the ratio 1:3:6 in any order M1 for $54 ÷ (1 + 3 + 6) × 6$ A1 for 32.4(0) **Alternative** M1 for 1: 3: 6 oe or P + 3P + 6P (=10P) oe, e.g. T/3 + T + 2T (=10T/3) or e.g. B/6 + B/2 + B (=10B/6) or 5.4(0) or 16.2(0) seen M1 for $54 ÷ 10 × 6$ or $[54 ÷ '\frac{10}{3}'] × 2$ or $54 ÷ '\frac{10}{6}'$ oe A1 for 32.4(0) OR M1 for a partial decomposition of £54 in ratio 1:3:6, e.g. (£)5 +(£)15 + (£)30 (=(£)50) M1 for a decomposition of the remaining amount in ratio 1:3:6, e.g. 40(p) + 120(p) + 240 (=400(p)) A1 for 32.4(0)

1380_1F				
Question	Working	Answer	Mark	Notes
28		question + response boxes	2	B1 for an appropriate question with a specific time frame, e.g. each day B1 for at least 3 non-overlapping boxes (do not accept inequalities) NB do not accept frequency tables or data collection sheets
29	$(7{\times}2 + 2{\times}5) \times 200 = 4800$ 4800×8	38 400 g	5	M1 for 7×2 or 2×5 or 7×7 or 5×5 or 2×2 M1 for '7×2' + '2×5' oe or '7×7' − '5×5' M1(dep on first M) for '24' × 200 or '0.0024' × 2 M1 for '4800' × 8 or '0.0048' × 8 000 000 or '0.0048' × 8000 A1 for 38 400g or 38.4kg (SC B3 for any answer including digits 384)