1MA1 Practice Tests Set 1: Paper 2F (Regular) mark scheme – Version 1.0					
Question		**Working**	**Answer**	**Mark**	**Notes**
1			$\frac{9}{10}$ or 9 tenths	1	B1 for $\frac{9}{10}$ or 9 tenths
2			0.07, 0.7, 0.704, 0.74, 0.744	1	B1 cao
3			15*gh*	1	B1 cao
4			15.9489	1	B1 cao
5			12	2	M1 for 48 ÷ 4 or 48 × $\frac{1}{4}$ oe A1 cao
6	(i) (ii)		15, 9 □□□ □□ Key: □ = 4	5	B2 for both (B1 for 15 or 9) B1 for correct shapes for Bhavini B1 for correct shapes for David B1 for correct key: picture of a box, "4" and = (or is, etc.); accept alternatives that demonstrate 3 and/or 2 and/or 1with no errors.
7			e.g. 10, 12, 5, 2	3	M1 for at least 2 factors of 60 clearly identified M1 for 20 < sum of '4 distinct natural numbers' < 35 A1 cao
8			explanation	1	C1 for "he has divided 8 by 4 but should have divided 4 by 8" (or equivalent)

This publication may only be reproduced in accordance with Pearson Education Limited copyright policy.
©2016 Pearson Education Limited.

1MA1 Practice Tests Set 1: Paper 2F (Regular) mark scheme – Version 1.0					
Question		**Working**	**Answer**	**Mark**	**Notes**
9		Balance = £312 + £145 = £457 Sum of items = £450.32 Final balance = £6.68	6.68	4	M1 adding the items (= 450.32) M1 312 + 120 + 25 M1 "312 + 120 + 25"-"450.32" A1 cao
10			conclusion example	1 1	C1 for No and example, e.g. "10 – –2 = 12" or statement, e.g. "If you subtract a negative number the answer will be greater than 10" C1 for appropriate example, e.g. 14 ÷ 2 = 7
11	(i) (ii)		cone cylinder	1 1	B1 for cone or alternative spellings only that sound like "cone" B1 for cylinder or alternative spellings only that sound like "cylinder". Accept circular based prism
12	(a) (b)	8 × 30 + 20 34 × 8 = 272 300 – 272 **OR** 34 × 8 + *b* = 300 272 + *b* = 300 *b* = 300–272	260 28	2 3	M1 for 8 × 30 + 20 A1 cao M1 for 34 × 8 or 272 or forming equation M1 dep for 300 – "272" A1 cao **OR** M1 300 = 34 × 8+b M1 300 –"34×8"=b A1 cao

1MA1 Practice Tests Set 1: Paper 2F (Regular) mark scheme – Version 1.0					
Question		**Working**	**Answer**	**Mark**	**Notes**
13	(a)	100 – 20 – 24	56	2	M1 A1 cao
	(b)		$\frac{6}{25}$	2	M1 A1 $\frac{24}{100}$ oe
	(c)		15	2	M1 $\frac{20}{100} \times 75$ or $\frac{75}{5}$ oe A1 cao SC: Award B1 for final answer of 60
14	(a)		£123-£127	1	B1 £123-£127 inclusive
	(b)		35-36	1	B1 35-36 inclusive
	(c)	8.6 × 5 = 43 → "£180"	£175-£185	3	M1 8.6×5 A1 43 A1 answers in the range £175-£185 SC: B2 for 43
15	(a)		2.30 pm	1	B1 cao
	(b)		1 hour	1	B1 for 1 hour or 60 minutes
	(c)		5 pm	1	B1 cao
	(d)		4.5	1	B1 for 4.5 hours oe

1MA1 Practice Tests Set 1: Paper 2F (Regular) mark scheme – Version 1.0					
Question		**Working**	**Answer**	**Mark**	**Notes**
16	(a)		correct arrangement shown	2	B2 twelve stones shown in a rectangle (ok if pond in the middle) or a rectangle with correctly labelled sides (B1 for rectangle drawn or 12 stones used)
	(b)(i)		10	3	B1 cao
	(ii)		$14m^2$		B1 for 14 B1 for m^2
17		$36 \times 8.5 \times 5 = 1530$ $1530 \div 8 = 191.25$ or could plan for 191, 191, 191 then 192	191 or 192	4	M2 $36 \times 8.5 \times 5$ (M1 for the product of any two of these terms) M1 (dep on at least M1 achieved) $\div 8$ A1 cao
18	(a)	$1 - 0.2 - 0.1$ $0.7 \div 2$	0.35	3	M1 for correctly using total probability is 1 or 100% if percentages used M1 (dep) for complete correct method to complete the solution A1 for 0.35 or 35% or $\frac{35}{100}$ oe
	(b)		20	2	M1 for 0.1×200 oe A1 cao SC : If M0 then award B1 for an answer of $\frac{20}{200}$

1MA1 Practice Tests Set 1: Paper 2F (Regular) mark scheme – Version 1.0					
Question		**Working**	**Answer**	**Mark**	**Notes**
19			488	3	M1 600 × 67.1 (= 40260) or 67.1 ÷ 82.5 (= 0.813…) M1 (dep) "40260" ÷ 82.5 or "0.813.." × 600 A1 cao SC: B2 for 712
20		$6^2 + 9^2 = 117$ $\sqrt{117}$ =	10.8	3	M1 for $6^2 + 9^2$ M1 for $\sqrt{36+81}$ or $\sqrt{117}$ A1 for 10.8 – 10.82
21	(a)		Negative	1	B1 cao
	(b)		117–123	2	M1 for a line of best fit drawn between (9,130) and (9, 140) and between (13,100) and (13,110) inclusive A1 for 117 – 123
22		12, 24, 36, 48, 60, 72, …. 8, 16, 24, 32, 40, 48, 56, 64, 72,…	25.80	5	M1 for listing at least 3 multiples of each of 12 and 8 or 24 in two lists of multiples or from factor trees M1 (dep) for attempt to find a common multiple of 12 and 8 above 60 (= 72) M1 (dep M2) for method to find the number of boxes **and** the number of packs 72 ÷12 (= 6) and 72 ÷ 8 (= 9) M1 for finding the total cost by multiplying numbers by cost and adding eg "6" × 2.50 + "9" × 1.20 A1 for 25.8(0)

1MA1 Practice Tests Set 1: Paper 2F (Regular) mark scheme – Version 1.0					
Question		**Working**	**Answer**	**Mark**	**Notes**
23		5, 13, 29, 53, 85, 125	(85)	2	M1 for correct evaluation of at least 3 odd cases or sequence of 5, (8), 13, (20), 29… seen or the expression with $n = 9$ or 11 or 19 or 21 or … substituted but not evaluated A1 for 85 or 125 or 365 or 445 or … identified
24		$2y - -y = 3 - 6$ or $x + 2x = 3 + 12$	$x = 5, y = -1$	3	M1 for a complete method to eliminate one variable (condone one arithmetic error) A1 $x = 5$ A1 $y = -1$ NB: Candidates showing no working score 0 marks
25			28% or $\frac{14}{50}$	4	M1 for $100 - 30$ (= 70) or $1 - \frac{3}{10\left(=\frac{7}{10}\right)}$ M1 for "70" ÷ (3 + 2) (= 14) or $\frac{7}{10} \div (3 + 2)\left(=\frac{7}{50}\right)$ M1 for "14" × 2 or $\frac{7}{50} \times 2$ A1 for 28% or $\frac{14}{50}$ oe OR M1 for a correct method to find (100 – 30)% of any actual sum of money M1 for "350" ÷ (3 + 2) (= 70) M1 for "70" × 2

1MA1 Practice Tests Set 1: Paper 2F (Regular) mark scheme – Version 1.0					
Question		**Working**	**Answer**	**Mark**	**Notes**
					A1 for 28% or $\frac{14}{50}$ oe OR M1 for starting with two numbers in ratio 3:2, e.g. 21 and 14 M1 for equating sum of their numbers to 100 – 30 (=70%), eg '21' + '14' (=35) M1 for scaling sum of their numbers to 100%, e.g. '35' ÷ 70 × 100 (=50) A1 for 28% or $\frac{14}{50}$ oe SC: award B3 for oe answers expressed in an incorrect form e.g. $\frac{2.8}{10}$

National performance data from Results Plus

Qu	Spec	Paper	Session YYMM	Qu	Topic	Mean score	Max score	Mean % all	Mean score of students achieving grade: ALL	C	D	E	F	G
1				NEW	Place value		1		No data available					
2				NEW	Ordering decimals		1		No data available					
3				NEW	Simplifying expressions		1		No data available					
4	5MM2	2F	1111	Q01d	Four operations	0.69	1	69	0.69	0.88	0.82	0.64	0.40	0.35
5	1MA0	1F	1406	Q07a	Scales	1.33	2	67	1.33	1.85	1.71	1.55	1.27	0.85
6	1380	2F	1106	Q04	Pictograms	4.19	5	84	4.19	4.82	4.63	4.30	3.54	2.48
7	1MA0	2F	1206	Q16	Factors and multiples	1.94	3	64	1.94	2.69	2.37	1.93	1.31	0.74
8				NEW	Solving linear equations		1		No data available					
9	5AM1	1F	1106	Q04a	Four operations	4.61	4	80	3.21	4.00	3.78	2.75	3.38	2.75
10				NEW	Algebraic proof		2		No data available					
11	1380	2F	906	Q07	Properties of 3D shapes	1.58	2	79	1.58	1.84	1.71	1.52	1.26	0.97
12	5AM2	2F	1111	Q07	Money calculations	3.54	5	71	3.54	4.43	4.46	3.61	3.11	2.69
13	4MA0	1F	1501	Q07	Percentages	5.05	6	84	5.05	5.85	5.47	4.52	3.55	1.60
14	2540	2F	806	Q08	Graphs of real-life situations	3.35	5	67	3.35	4.56	3.86	2.78	1.85	1.13
15	5AM2	2F	1206	Q12	Distance-time / speed graphs	2.98	4	75	2.98	3.42	3.07	2.77	2.55	1.69
16	5AM1	1F	1111	Q07	Perimeter and area	2.52	5	50	2.52	3.48	3.17	2.57	2.09	1.61
17	5AM1	1F	1106	Q12	Ratio	1.76	4	44	1.76	3.67	2.83	1.88	1.38	0.33
18	1MA0	2H	1303	Q04	Probability	4.00	5	80	4.00	4.25	2.74	0.84		
19	4MA0(R)	2F	1501	Q17	Proportions	2.30	3	77	2.30	2.67	2.08	1.33	0.50	
20	5MM2	2F	1211	Q26	Pythagoras in 2D	1.00	3	33	1.00	2.90	1.88	0.52	0.14	0.11
21	1380	2F	911	Q27	Scatter diagrams	1.66	3	55	1.66	2.47	1.86	1.21	0.69	0.45
22	1MA0	2H	1406	Q14	HCF and LCM	3.68	5	74	3.68	3.58	2.77	1.58		
23	2540	2H	811	Q05	Number sequences	0.74	2	37	0.74	0.45	0.12	0.09		
24	4MA0(R)	2F	1501	Q20	Solving simultaneous equations	0.72	3	24	0.72	0.94	0.62	0.00	0.00	0.00
25	1MA0	2H	1306	Q07	Ratio	1.58	4	40	1.58	1.01	0.33	0.09		
							80							