Paper 1MA1: 2F				
Question	**Working**	**Answer**	**Mark**	**Notes**
15 (a)		0.47	B1	
(b)		2.28×10^9	M1	for correct value but not in standard form, eg $22.8 \times 10^{3+5}$, 228×10^7, 2 280 000 000 or for 2.28×10^n , $n \neq 9$
Q1			A1	cao

Paper: 1MA1/3F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
18	2.3×10^6	M1	for 2.3×10^n where $n \neq 6$ **or** 23×10^5 or 2300000 **or** 2645000000 and 1150 seen	2300000 could be written as 2.3 million
Q2		A1	cao	

Paper: 1MA1/1F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
26 (a)	0.00163	B1	cao	
(b)	4.38×10^5	B1	cao	
(c)	2.4×10^{-1}	M1	for $4\times6\times10^{3-5}$ **or** 0.24 oe eg 24×10^{-2} **or** 2.4×10^n where $n \neq -1$	
Q3		A1	cao	

Paper 1MA1: 1F				
Question	**Working**	**Answer**	**Mark**	**Notes**
21 **Q4**		1.8×10^{-3}	M2 (M1 A1	for $\frac{6\times10^{-2}\times3\times10^{-4}}{1\times10^{-2}}$ or 18×10^{-4} or 0.0018 as the answer for 6×0.0003 **or** 0.06×0.03 **or** 1.8×10^{n} ($n \neq -3$) **or** $0.000018 \div 0.01$ **or** rewriting one number in standard form) cao

Paper: 1MA1/3F				
Question	**Working**	**Answer**	**Mark**	**Notes**
25 **Q5**		0.000 745 2	M1 A1	for digits 7452 seen cao

Paper: 1MA1/2F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
27 (a)	7.547×10^{-5}	B1	cao	
(b)	34200	B1	cao	
(c)	3.082×10^{15}	M1	for $\frac{23000\times6700}{0.00000005}$ **OR** for one calculation eg 1.541×10^{8} **or** 154 100 000 **or** 4.6×10^{11} **or** 1.34×10^{11}	
Q6		A1	for 3.082×10^{15} oe	Answer could be given as an ordinary number.

Paper: 1MA1/2F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
27 **Q7**	4.56×10^{-2}	M1 A1	for $0.000000342 \div 0.0000075$ **OR** for 0.0456 oe eg 0.456×10^{-1} **or** 45.6×10^{-3} **or** $\frac{57}{1250}$ **OR** for an answer of 4.56×10^{n} cao	

Paper: 1MA1/3F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
28 (a)	3.246×10^7	B1	cao	
(b)	0.00496	B1	cao	
(c)	No with explanation	C1	No and explanation that B is bigger as the power of 10 is bigger. **Acceptable examples** She is incorrect as 10^8 is smaller than 10^9 No, because B has more digits than A No, A is millions but B is billions No, if you subtract A from B the answer is positive (but if you subtract B from A the answer is negative) A= 621200000, B=4730000000, B is bigger No because she did not take into account standard form No as when you find the ordinary number B is greater than A **Not acceptable examples** Yes… A = 5 zeros after the number where as B = 7 zeros after the number No as 4.73×10^9 is one more than 6.212×10^8 6.212 is to the power of 8 and 4.73 is to the power of 9 so there is an extra digit Asma is wrong because she has more numbers behind the decimal point which means that it will be bigger than A No B has more zeros	Decision eg "No" may be seen by the question. "She is incorrect" is equivalent to "no"

Q8

Paper: 1MA1/2F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
27 (a)	5.62×10^{-3}	B1	cao	
Q9 (b)	1452	B1	cao	

Paper: 1MA1/1F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
28	0.000 672, 67.2×10^{-4} 6.72×10^{5} 672×10^{4}	B2 (B1	cao for correct conversions to same format, condoning one error. **or** for 3 numbers in the correct order (ignoring one) **or** for all 4 numbers listed in reverse order)	Accept correct numbers in any form
Q10				

Paper: 1MA1/3F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
23 (a)	450 000	B1	cao	
(b)	7×10^{-3}	B1	cao	
Q11 (c)	4.73×10^{3}	M1	for 4730 oe **or** for 4.73×10^{n} where $n \neq 3$	
		A1	cao	

Paper: 1MA1/3F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
29 (a)	0.000675	B1	cao	
(b)	6.592×10^5	M1	for 10.5472×10^3 oe or 1.6×10^8 oe or 2.575×10^{-1} oe or for 6.592×10^n where $n \neq 5$ or for 6.59×10^5 or for 6.6×10^5 or for 659200 oe	If the answer (for 2 marks) is seen in working and then rounded or truncated, award full marks.
Q12		A1	cao	