

Standard Form Mark Scheme:		
1(a)	1,240,000	[1]
1(b)	7.42×10^5	[1]
1(c)	0.00000063	[1]
2(a)	0.00099	[1]
2(b)	6.8×10^{-2}	[1]
2(c)	$6 \times 9 \times 10^3 \times 10^4 = 54 \times 10^7$	[1] Correct answer
	5.4×10^8	[1] Converted to standard form
3(a)	50	[1]
3(b)	0.027027	[1]
3(c)	2×10^2	[1] Correct answer
	200	[1] Converted to a number
4(a)	Four hundred and seventy thousand	[1]
4(b)	$7.2 \times 10^2 = 720$	[1] Correct conversion
	$4.66 \times 10^5 = 466,000$ $3.3 \times 10^{-4} = 0.00033$	[1] Correct conversions
	0.00033 0.87 46 720 6,311 466,000	[1] Correct order
5	$1.1 \div 1.2 = 11 \div 12 = 0.91\dot{6}$	[1] Correct inference from question.
	$10^9 \div 10^3 = 10^6$	[1] Multiplication of 10^n
	$0.916 = 9.16 \times 10^{-1}$ $9.16 \times 10^{-1} \times 10^6$ $9.16 \times 10^5 \text{ km/h}$	[1] Difference in speed with units
6	$k^2 = \frac{2 \times 6 \times 10^4 \times 10^6}{6 \times 10^6 - 2 \times 10^4}$	[1] Substitute in values for a and b
	$= \frac{12 \times 10^{10}}{6,000,000 - 100,000} = \frac{1.2 \times 10^{11}}{5,900,000}$	[1] Calculation
	$= \frac{1.2 \times 10^{11}}{5.9 \times 10^6}$	[1] Conversion to standard form
	$1.2 \div 5.9 \approx 0.20$ $10^{11} \div 10^6 = 10^5$	[1] Inferred from hint
	0.20×10^5 Answer = 2.0×10^4	[1] Final answer

END