Topic Test 1 Mark Scheme

Standard form - Higher

Q	Answer	Mark	Comments
1	Selects 5×10^3 and 2.8×10^5	B1	
	275 000	M1	oe May be implied by correct standard form Condone their largest – their smallest correctly evaluated
	2.75×10^5	A1ft	ft B0M1 converts their difference to standard form
2	2565.(...)	B1	oe May be implied by correct final answer
	2.6×10^3 or 3×10^3	B2ft	ft their answer converted to standard form and rounded to 2sf or 1sf B1ft Correct use of standard form $2.565... \times 10^3$ or Correct rounding to 2sf or 1sf 2600 or 3000 oe
3	0.000 006 2	B1	oe May be implied by correct final answer
	6.2×10^{-6}	B1ft	ft their answer converted to standard form
4	$5.2 \times 10^8 \div 645$	M1	oe
	806 201.(...)	A1	oe May be implied by correct standard form
	8×10^5 or 8.1×10^5 or 8.06×10^5 or $8.062... \times 10^5$	B1ft	ft their answer converted to standard form

Q	Answer	Mark	Comments
5(a)	$(2.7 \times 10^{-2}) \div (3.4 \times 10^{-4})$	M1	oe 0.0270 ÷ 0.000 340
	79.(...) or 80	A1	
5(b)	$(2.7 \times 10^{-2}) \times (1 - (3.4 \times 10^{-4}))$ or $(3.4 \times 10^{-4}) \times (1 - (2.7 \times 10^{-2}))$	M1	oe 0.0270 × 0.999 66 or 0.000 340 × 0.973
	$(2.7 \times 10^{-2}) \times (1 - (3.4 \times 10^{-4}))$ and $(3.4 \times 10^{-4}) \times (1 - (2.7 \times 10^{-2}))$	M1	oe
	0.02732164	A1	oe May be implied by correct final answer
	0.0273	A1ft	ft their answer rounded to 3sf if M1M1 scored
6	$3.72 \times 10^{13} \div 9 \times 5$	M1	
	$2.066... \times 10^{13}$	A1	oe May be implied by correct final answer
	2.07×10^{13} or 2.1×10^{13} or 2×10^{13}	A1ft	ft their answer in standard form and rounded to 3sf, 2sf or 1sf if M1scored