SECTION A

1	(a) $\frac{1}{25}$ or 0.04 (b) 8	1 1 **[2]**	after 1/25 ignore wrong attempts at decimals after 0 SC1 for $1/5^2$ **and** $\sqrt{64}$
2	$\frac{10}{36}$ oe isw	4 **[4]**	SC3 for $\frac{5}{36}$ M2 for $\frac{1}{6}\times\frac{5}{6}$ seen **or** M1 for $\frac{1}{6}$ *or* $\frac{5}{6}$ seen **and** M1 $\frac{1}{6}\times\frac{5}{6}\times 2$ soi (may be in tree diagram)
3	176	2 **[2]**	M1 for 250.5 or 74.5 seen
4	$P\hat{O}Q$ = 100 may be in diagram $\angle$s at P & Q = 90 and $\angle$s of a quad add to 360 or use of isos. triangles $P\hat{R}Q$ = 50 (or ft half 'their $P\hat{O}Q$' but not 80) angle at centre = twice angle at circumference.	1 1 1 1 **[4]**	if $\angle$ between radius and tangent mentioned accept lesser reason for $\angle$s in quad or isos. triangles. SC2 for 50° with no reason.
5	any 3 of 3×10^8, 4, 400, 20 (or 25), and 4000 1.44 to 7.20 $\times$ 10^{16} oe incorrect (should be 4(.14) $\times$ 10^{16})	M1 M1 A1 **[3]**	or any 3 rounded **up or truncated** to 1 sig fig (dep on M2) after M1,M0 SC1 for correct ans for 'their estimate'.
6	(a) x^2+x-30 (b)(i) $(x-4)(x-6)$ (ii) $\frac{x-6}{x+4}$ mark final answer	2 2 3 **[7]**	1 for 2 correct terms **or** 2 from $x^2-5x+6x-30$ 1 for brackets including 6 and 4 with any sign combination. M1 for $(x-4)(x+4)$ seen & M1 for use of (b)(i)
7	13^2-12^2 or $CT^2+12^2=13^2$ (BT or CT =) 5 or $\sqrt{25}$ or BT^2 or CT^2 = 25 BC = $\sqrt{5^2+5^2}$ or $BC^2=5^2+5^2$	M1 A1 A1 **[3]**	SC2 for BT or CT = 5 with no working oe. e.g. AC = 10 $AB^2+BC^2=100$ $AB^2=BC^2=50$

Section A Total: 25