16 (a)	$Q = k\sqrt{t}$		3	M1	for linking Q and t correctly (must have constant eg k) (allow $Q \propto k\sqrt{t}$)
	eg $6 = k\sqrt{4}$ or $3 = k\sqrt{1}$ or $k = 3$			M1	for substituting a suitable pair of values **or** finding $k = 3$ (allow $\propto$ sign)
	Correct answer scores full marks (unless from obvious incorrect working)	$Q = 3\sqrt{t}$		A1	oe allow q for Q (must have =) allow 2.95 – 3.05 for k if method clearly shown and readings correct ±0.5 small square allow an answer of $Q = k\sqrt{t}$ with $k = 3$ clearly stated
(b)	1.2^2 or 1.44 or 144 could be within a calculation eg $\left(\frac{3\times1.2}{3}\right)^2 (=1.44)$ or $\left(\frac{6\times1.2}{3}\right)^2 (=5.76)$ eg $\left(\frac{6\times1.2}{"3"}\right)^2 \div 4\ (=1.44)$ or $\left(\frac{6\times1.2}{3}\right)^2 - 4 (=1.76)$ eg 6 ×1.2 = 7.2 and reading from Q = 7.2 to t axis and calculates t value ÷ 4 (or 0.04)		2	M1ft	ft for an equation in the correct form Stating the multiplier 1.2^2 or 1.44 or 144 or showing the multiplier within a calculation or for using a pair of values and showing a correct calculation for the increase in t, ft their k from (a) or correct calculation and use of graph
	Correct answer scores full marks (unless from obvious incorrect working)	44		A1	allow 43 – 45 as long as not from incorrect working
					Total 5 marks