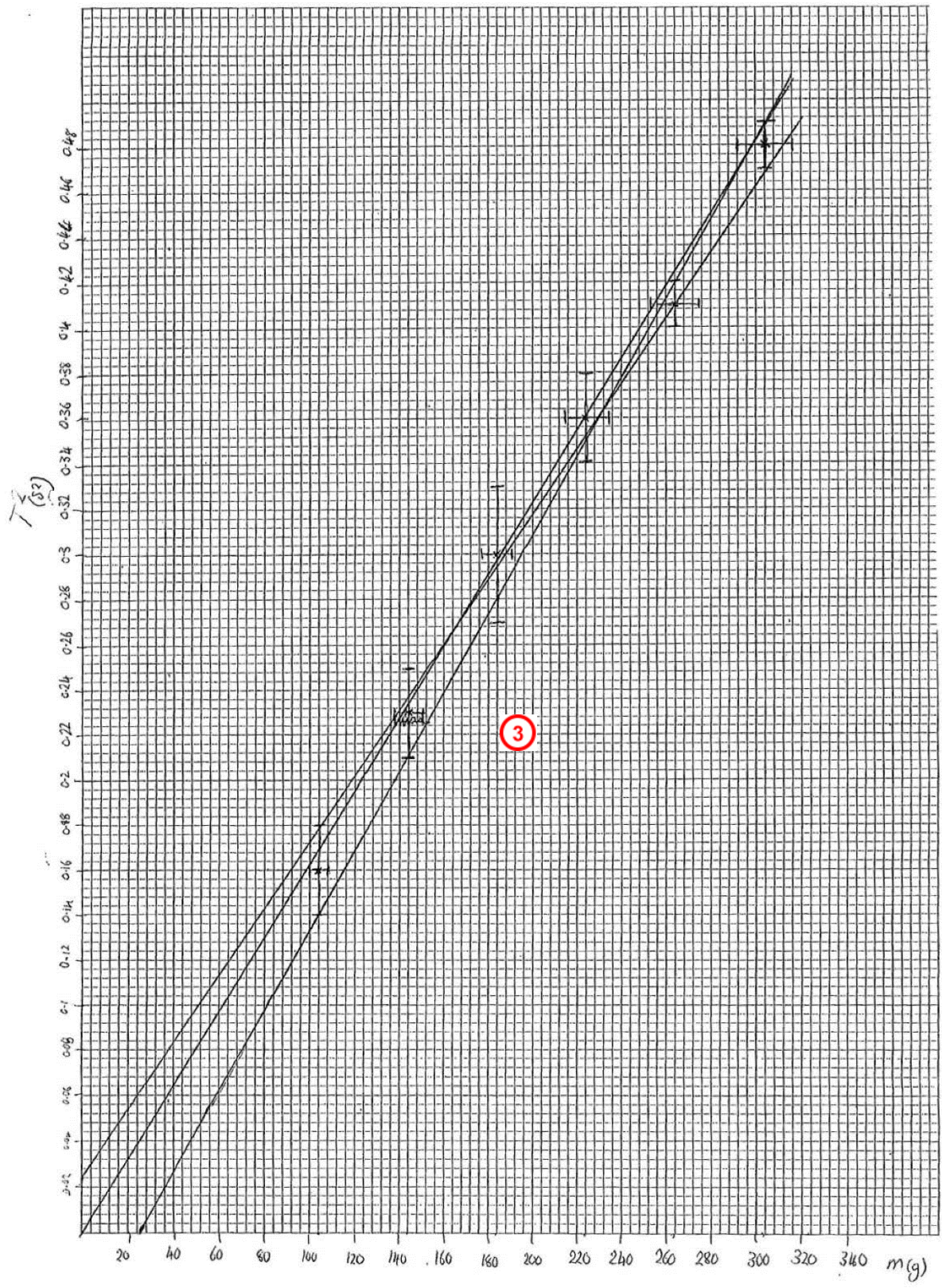


Student 5: Low Achieved
NZQA Intended for teacher use only

W



%ΔT² not correct

Mass (g) ①	Error ±4% ②	Time (s) ①	Average time (s)	Error in t (0.5 range) ②	% error in T	T ² (s ²)	Error in T ²	% error in T ²
103	±4	0.41, 0.4, 0.41, 0.39, 0.4	0.40	0.02	5%	0.16	0.04	25%
143	±6	0.48, 0.48, 0.47, 0.49, 0.48, 0.48	0.48	0.02	4%	0.23	0.04	17%
183	±7	0.53, 0.55, 0.56, 0.55, 0.54, 0.54	0.55	0.03	5%	0.30	0.06	20%
223	±9	0.61, 0.60, 0.60, 0.61, 0.59, 0.61	0.60	0.02	3%	0.36	0.04	11%
263	±11	0.64, 0.64, 0.64, 0.64, 0.63, 0.63	0.64	0.01	2%	0.41	0.02	5%
303	±12	0.69, 0.69, 0.69, 0.69, 0.69, 0.68	0.69	0.01	1%	0.48	0.02	4%

④ ∴ $1.6 \pm 0.2 = 1.4, 1.5, 1.6, 1.7, 1.8$

∴ $T^2 = 1.6 \pm 0.2m$ is $T^2 = \frac{4\pi^2}{k}m$