

Questions

Q1.

$$* m = \frac{\sqrt{s}}{t}$$

$s = 3.47$ correct to 2 decimal places
 $t = 8.132$ correct to 3 decimal places

By considering bounds, work out the value of m to a suitable degree of accuracy.

You must show all your working and give a reason for your final answer.

(Total for Question is 5 marks)

Mark Scheme

Q1.

	Working	Answer	Mark	Notes
*		0.229 because the LB and UB agree to that number of figures	5	<p>B1 for 3.465 or 3.475 or 3.474999...</p> <p>B1 for 8.1315 or 8.1325 or 8.132499...</p> <p>M1 for as $\frac{\sqrt{3.475}}{8.1315}$ UB OR as $\frac{\sqrt{3.465}}{8.1325}$ LB</p> <p>C1 (dep on all previous marks) for 0.2292... and 0.2288... both values must clearly come from working with correct values</p> <p>C1 for 0.229 from 0.2292... and 0.2288... and 'both LB and UB round to 0.229'</p>