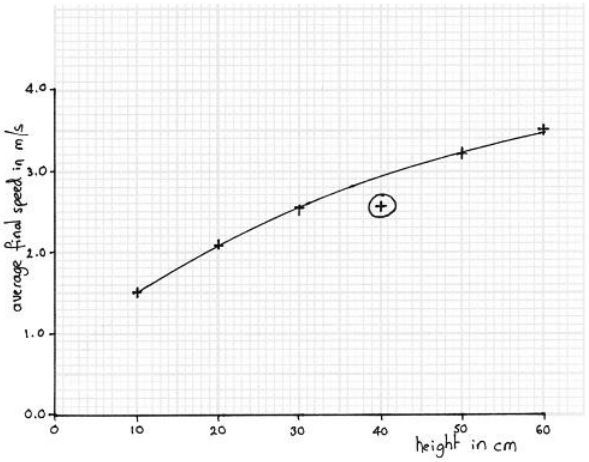
<table>
<tr>
<td>(ii)</td>
<td>suitable linear scale chosen (>50% of grid used);
axes labelled with quantities and unit;
plotting correct to nearest half square (minus one for each plotting error);;

 
</td>
<td>ignore orientation

ignore final point
i.e. two plotting errors = no marks for plotting

<table>
<tr><th>height in cm</th><th>average final speed in m/s</th></tr>
<tr><td>10.0</td><td>1.39</td></tr>
<tr><td>20.0</td><td>1.97</td></tr>
<tr><td>30.0</td><td>2.43</td></tr>
<tr><td>40.0</td><td>2.45</td></tr>
<tr><td>50.0</td><td>3.09</td></tr>
<tr><td>60.0</td><td>3.40</td></tr>
</table>
</td>
<td>4</td>
</tr>
<tr>
<td>(iii)</td>
<td>(40.0,2.45) identified clearly;</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>(iv)</td>
<td>line (curve) of best fit acceptable, ignoring anomalous point;</td>
<td>i.e. smooth curve within 1 small square of each point
ignore parts of curve outside plotted points if extrapolated</td>
<td>1</td>
</tr>
<tr>
<td>(v)</td>
<td>idea that (average final) speed increases with height;

idea that relationship is non-linear;</td>
<td>allow RA
ignore ‘positive correlation’
ignore references to line being curved
allow
not proportional
allow idea of gradient changing</td>
<td>2</td>
</tr>
</table>

Question number	Answer	Notes	Marks
5 (a)	D; The only correct answer is D A is not correct because it's the wavelength B is not correct because it's half the wavelength C is not correct because it's twice the amplitude		1
(b)	evidence of frequency being number of waves per unit time; evaluation; matching unit; e.g. (f =) 18/12 (f =) 1.5 Hz	explicit or implied by working must match units used in calculation allow hertz, s^{-1}, (waves) per second allow any suitable unit of frequency for 1 mark if no other mark scored	3
(c)	any 1 of: named part of the EM spectrum; light; (waves on a) rope / string; (waves on a) slinky if appropriately described;	allow 'EM waves' allow (secondary) seismic wave	1