

Question number	Answer	Accept	Reject	Marks
6 (a) (i)	voltage = current x resistance;	$V = I \times R$ Accept rearrangements		1
(ii)	Substitution and rearrangement (of correct equation); Answer given to at least 3 s.f.; e.g. $230 / 22$ $= 10.45 \text{ (A)}$ ( $\approx 10 \text{ A}$ )	Ignore calculations of voltage or resistance  $10.5 \text{ A (= 10 A)}$		2
(b) (i)	Any two of: MP1 As a safety device / reduces danger /reduces hazards; MP2 In case of fault / short; MP3 Idea of excessive current; MP4 Prevents (wires or appliance) overheating/fire;	Ignore any reference to electric shock  More than 13A		2
(ii)	MP1 Because total current (in motor and heater) is more than 2A;  MP2 A 2 A fuse would blow / melt / would need to be replaced / circuit would be broken;	Accept reverse arguments		2

**Total 7 marks**