Student 1

(a) *So that current can be changed.*

(b) *(i) When voltage is increased, the current increases too. But the graph is a curve - so as voltage goes up higher, the current doesn't go up as quickly. The curve tails off.*

(ii) $V = I \div R$

(iii) On the graph, when V = 2.5, current = 0.09

$V = I \div R$ *so* $R = V \div I$

$= 2.5 \div 0.09$

$R = 27.7777777\ \Omega$

(c) *It goes up and then goes down.*

Student 2

(a) R is a resistor.

(b) (i) When the voltage goes up the current goes up so the current is proportional to the voltage.

(ii) V = C x R

(iii) 2.5 = 0.084 x R

R = 2.5 – 0.084

= 2.416

(c) Nothing happens.