Series and Parallel Circuits

Mark Scheme

Level	GCSE (9-1)
Subject	Combined Science: Trilogy - Physics
Exam Board	AQA
Topic	6.2 Electricity
Sub-Topic	Series and Parallel Circuits
Difficulty Level	Silver Level
Booklet	Mark Scheme

Time Allowed: **9 minutes**

Score: **/9**

Percentage: **/100**

Grade Boundaries:

M1.(a) 0.093 A

1

(b) 0.093 A

1

(c) (increasing the resistance) decreases the current

1

therefore (the lamp will be) dimmer

1

(d) potential difference = current × resistance

accept correct rearrangement with R as subject

1

(e) 3.3 = 0.15 × R

1

R = 3.3 / 0.15 (Ω)

1

R = 22 (Ω)

1

*allow 22 (Ω) without working shown for **3** marks*

(f) line drawn from the origin with a decreasing gradient.

1

[9]