

Newton's Third Law

Mark Scheme

Level	GCSE (9-1)
Subject	Combined Science: Trilogy - Physics
Exam Board	AQA
Topic	6.5 Forces
Sub-Topic	Newton's Third Law
Difficulty Level	Gold Level
Booklet	Mark Scheme

Time Allowed: 10 minutes

Score: /10

Percentage: /100

Grade Boundaries:

M1.(a) the forces are equal in size and act in opposite directions

1

(b) (i) forwards / to the right / in the direction of the 300 N force
answers in either order

1

accelerating

1

(ii) constant velocity to the right

1

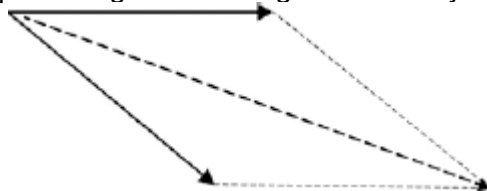
(iii) resultant force is zero
accept forces are equal / balanced

1

so boat continues in the same direction at the same speed

1

(iv) parallelogram or triangle is correctly drawn with resultant



3

value of resultant in the range 545 N – 595 N

parallelogram drawn without resultant gains 1 mark

If no triangle or parallelogram drawn:

*drawn resultant line is **between** the two 300 N forces gains 1*

mark

*drawn resultant line is between and longer than the two 300
N forces gains **2** marks*

1

[10]