AQA GCSE Physics | 8463

SPECIFICATION POINT 4.5.1.1

Scalar and vector quantities

Mark schemes and examiner comments

Tier	**Foundation**
Question groups	**2**
Available paper years	**2009–2024**

Using this booklet

1. Booklet answer numbers match the question booklet.
2. Use the original question number within marking tables.
3. Examiner comments are included where available.

Name: _____ **Date:** _____

Where a precise marking extract is unavailable, the full source document is included in an appendix. Any missing mark scheme is explicitly identified.

4.5.1.1 Scalar and vector quantities

Answer 01 · Mark scheme

November 2009 | PHY1AP | Original Q1 | Legacy

Question			Key
One	**A**	conductors	**4**
	B	convectors	**3**
	C	radiators	**2**
	D	reflectors	**1**

4.5.1.1 Scalar and vector quantities

Answer 02 · Mark scheme

June 2024 | 8463/2F | Original Q5

Question 5

Question	Answers	Extra information	Mark	AO / Spec. Ref.
05.1	distance speed		1 1	AO1 4.5.6.1.1 4.5.6.1.3

Question	Answers	Extra information	Mark	AO / Spec. Ref.
05.2	3200 (m)		1	AO2 4.5.6.1.4

Question	Answers	Extra information	Mark	AO / Spec. Ref.
05.3	average speed = $\frac{3200}{2000}$ = 1.6 (m/s)	allow ecf from question **05.2**	1 1	AO2 4.5.6.1.2

Question	Answers	Extra information	Mark	AO / Spec. Ref.
05.4	B It has the smallest gradient	 MP2 is dependent on MP1	1 1	AO3 AO1 4.5.6.1.4

Question	Answers	Extra information	Mark	AO / Spec. Ref.
05.5	gravity		1	AO3 4.5.2

Question	Answers	Extra information	Mark	AO / Spec. Ref.
05.6	3.0 m/s		1	AO1 4.5.6.1.2

Total Question 5	**9**

4.5.1.1 Scalar and vector quantities

Answer 02 · Examiner comments June 2024 | 8463/2F | Original Q5

05.1
37% of students identified two scalar quantities from the list, and. 40% could identify one.

05.2
87% of students were able to read the correct value from the distance-time graph.

05.3
Most students correctly used their answer from 05.2 to calculate the average speed.

05.4
Only 2% of students scored both marks, as many found it difficult to explain why they had chosen the correct section of the graph.

05.5
Many students scored this mark about doing work against gravity.

05.6
79% of students scored this mark for recalling the typical running speed of a person.