

Q1. (2019)

0 3 Some quantities are scalars and some are vectors.

0 3 . 1 Which of the following quantities are scalars?

[2 marks]

Tick (✓) **two** boxes.

Displacement

☐

Distance

☐

Force

☐

Speed

☐

Velocity

☐

Q2. (2019)

0 3 . 2 Give the difference between a vector quantity and a scalar quantity.

[1 mark]

Q3. (2020)

0 4 **Figure 8** shows a girl bowling a ball along a ten-pin bowling lane.

Figure 8



The girl is trying to knock down the ten pins at the end of the bowling lane.

0 4 . 1 Velocity is a vector quantity, speed is a scalar quantity.

Describe what is meant by a vector quantity and a scalar quantity.

[2 marks]

Vector quantity _____

Scalar quantity _____

Q4. (2021)

0 2

Professional rugby players wear a tracking device that measures their velocity and acceleration.

Figure 2 shows a player wearing a tracking device.

The player is tackling another player who is running with the ball.

Figure 2



a)

0 2 . 1

Velocity and acceleration are both vector quantities.

What is a vector quantity?

[1 mark]

Tick (✓) **one** box.

A quantity with both magnitude and direction

☐

A quantity with direction only

☐

A quantity with magnitude only

☐

b)

0 2 . 2

Which of the following is a vector quantity?

[1 mark]

Tick (✓) **one** box.

Displacement

☐

Distance

☐

Time

☐

Work done

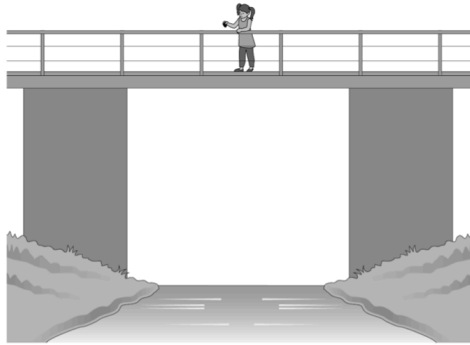
☐

Q5. (2023)

0 6

Figure 9 shows a child dropping a stone into water.

Figure 9



0 6 . 2

Velocity is a vector.

Describe the velocity of the stone as it falls through the air.

Assume there is no air resistance.

[2 marks]