

GCSE Physics A (Gateway)

J249/01 Physics A P1-P4 and P9 (Foundation Tier)

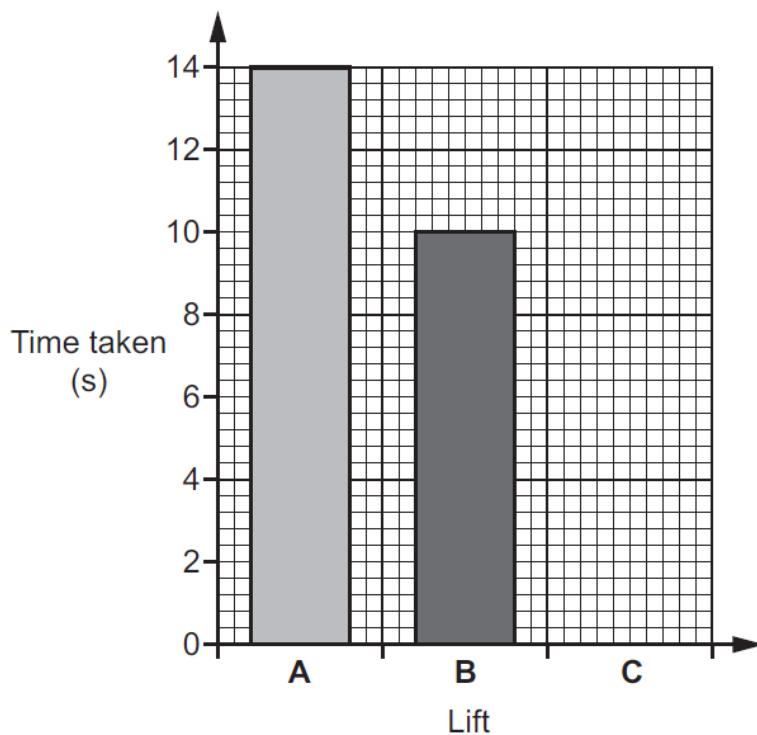
Question Set 12

1

A tall building needs a lift to move people from one floor to another.

The builder has a choice of three different lifts.

Each lift takes a different amount of time to move between the two floors. Look at a bar chart of the time taken for each lift.



(a) (i) Lift C takes 12s to move between the two floors.

Draw a bar for lift C on the bar chart.

[1]

(ii) Calculate the **mean** time of the three lift journeys

Mean =s

[2]

(iii) Explain which lift uses the most power.

[2]

(b) (i) One lift uses 50 000 J for a 12 s journey.

Calculate the power of the lift.

Give your answer to **1** decimal place.

Power = W **[4]**

(ii) When the lift is broken the stairs are used.

Calculate the work done when a 750 N person climbs a distance of 4 m.

Work done = J **[3]**

Total Marks for Question Set 12: 12

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