

**Gateway Science Physics A**

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

**Question Set 19**

19

Four students investigate the work done in moving a trolley.

**work done = force × distance**

Each student moves a trolley by a different distance using a different force.

Their results are shown in the table.

Student	Force (N)	Distance moved (m)
A	100	5
B	50	10
C	120	12
D	40	4

(a) Which student does the most work?

Show your working.

[2]

(b) Which **two** students do the same amount of work?

[1]

(c) State **two** reasons why it is important to repeat measurements in any experiment.

[2]

(d) Student **C** pushes the trolley for 0.5 minutes.

What is the power, in W, used by student **C**?

Show your working.

Answer = ..... W

[4]

**Total Marks for Question Set 19: 9**

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