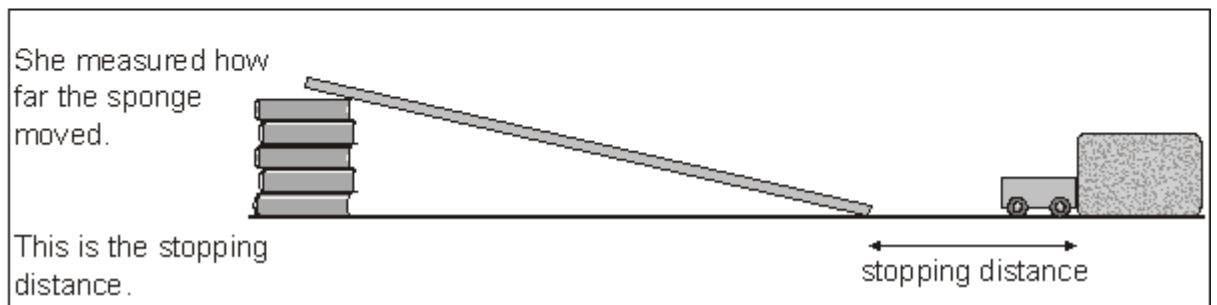
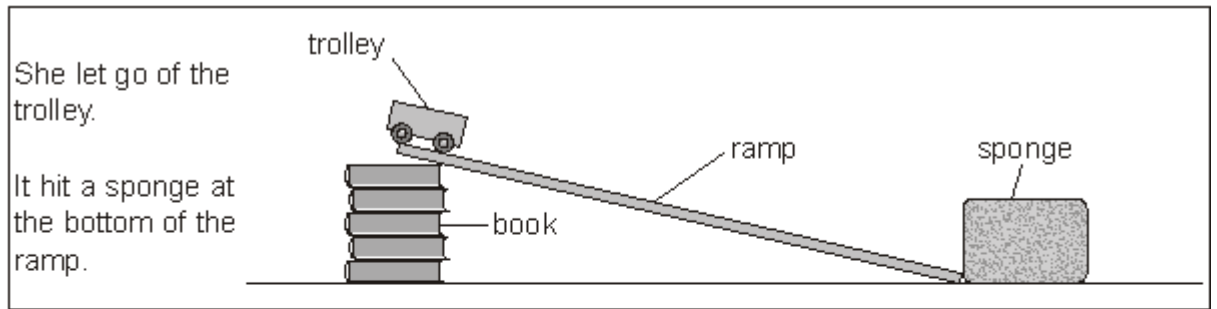


Q1.

Yasmin investigated the stopping distance of a trolley.



- (a) Yasmin did the investigation five times.
She changed the steepness of the ramp each time.

- (i) How could she make this ramp steeper?

.....
.....

1 mark

- (ii) Yasmin's results are shown in the table.

steepness of ramp	stopping distance (cm)
A	10
B	16
C	16
D	28
E	34

She predicted, 'The steeper the ramp, the greater the stopping distance'.
If Yasmin was correct, which ramp was the steepest? Write the letter.

.....

1 mark

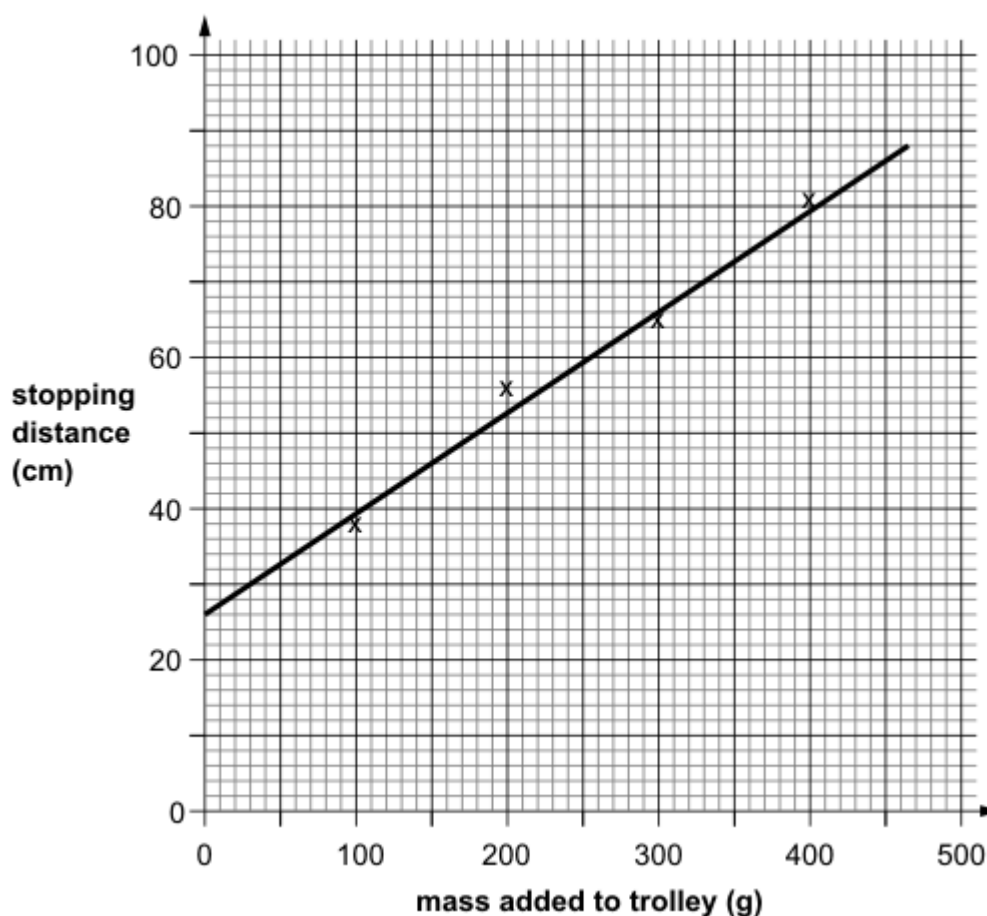
- (iii) Yasmin looked at her results and decided she should repeat her investigation.
Look at Yasmin's results.

Suggest why she decided to repeat her investigation.

.....

1 mark

- (b) Yasmin then investigated the stopping distance of a trolley with different masses on it.
The graph shows her results.



- (i) What would be the stopping distance if 0 g were on the trolley?

..... cm

1 mark

- (ii) Complete the sentence with **decreases**, **increases** or **stays the same**.

As the mass added to the trolley increases,

the stopping distance

1 mark

maximum 5 marks

Mark schemes

Q1.

(a) (i) any **one** from

- add more books
accept 'use bigger books'
'change the number of books'
or 'change the size of the books' are insufficient
- make the pile of books higher
accept 'lift one end of the ramp higher'
'lift the ramp higher' is insufficient
accept 'bring the ramp closer to the books'
*do **not** award a mark for answers implying the use of a different ramp*

1 (L3)

(ii) • E

1 (L3)

(iii) any **one** from

- some results are the same
accept 'there are two 16s'
*do **not** accept '34'*
- some results do not fit the pattern
accept 'to check her results'
accept 'to make it more reliable'
accept 'in case one was an odd result'
'because there was no pattern' is insufficient
*do **not** accept 'to make it a fair test'*

1 (L4)

(b) (i) • 26 cm

1 (L3)

(ii) • increases
accept 'goes up'

1 (L3)

[5]