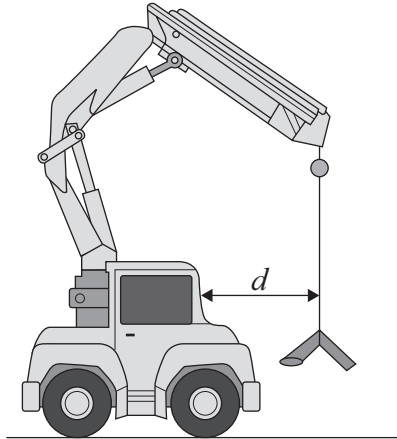


- 2 The diagram shows a small mobile crane. It is used on a building site.



The distance, d , is measured to the front of the cab.

The table shows information from the crane driver's handbook.

Load in kilonewtons (kN)	Maximum safe distance, d , in metres (m)
10	6.0
15	4.0
24	2.5
40	1.5
60	1.0

- 2 (a) What is the relationship between the load and the maximum safe distance?

.....

.....

.....

(2 marks)



- 2 (b) The crane driver studies the handbook and comes to the conclusion that a load of 30 kN would be safe at a distance, d , of 2.0 metres.

Is the driver correct?

Explain your answer.

.....

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.....

.....

(2 marks)

- 2 (c) What is the danger if the driver does not follow the safety instructions?

.....

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(1 mark)

- 2 (d) How should the data in the table have been obtained?

Put a tick (✓) in the box next to your answer.

average results from an opinion poll of mobile crane drivers

copied from a handbook for a similar crane

results of experiments on a model mobile crane

results of experiments on this mobile crane

(1 mark)

6

Turn over ►

