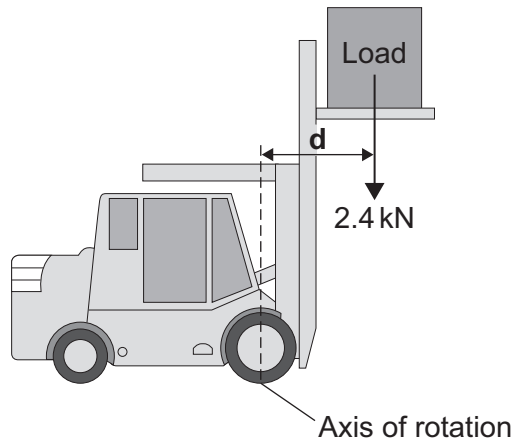


- 5 The diagram shows a fork-lift truck with a load of 2.4 kN. The clockwise moment caused by this load is 2880 Nm.



- 5 (a) Use the equation in the box to calculate the distance **d**.

$\text{moment} = \text{force} \times \text{perpendicular distance from the line of action of the force to the axis of rotation}$
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Show clearly how you work out the answer and give the unit.

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Distance **d** = .....  
(3 marks)



5 (b) This warning notice is in the driver's cab.

**Warning**  
**Maximum load 10.0 kN**  
**This load must not be exceeded**

Explain in terms of moments why the maximum load must not be exceeded.

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(2 marks)

5
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Turn over for the next question

Turn over ►

