

MECHANICS I (Static)MID EXAM

PREPARED BY ETHIO EXAMS OFFICIAL TELEGRAM

CHANNEL

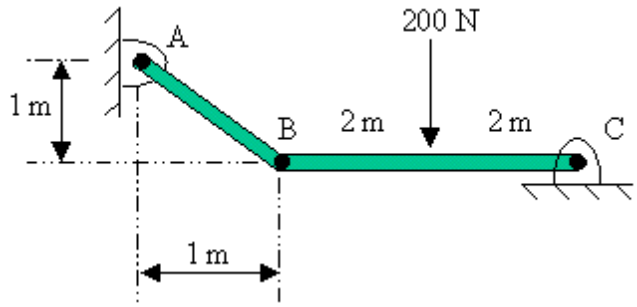
Ethio Exams

https://t.me/ethio_ exams2

Two and Three- Force Members

Select the answer for each of the following questions, then press "Mark" at the bottom of the page to receive feedback.
A pen and paper may be required to assist in the answering of some questions.
Questions beginning with "cont...." follow on from the previous question.

1) On a sheet of paper draw the free- body diagram of member BC, then specify the single equation of equilibrium that should be applied to determine the resultant force acting at the ends of the two- force member AB.

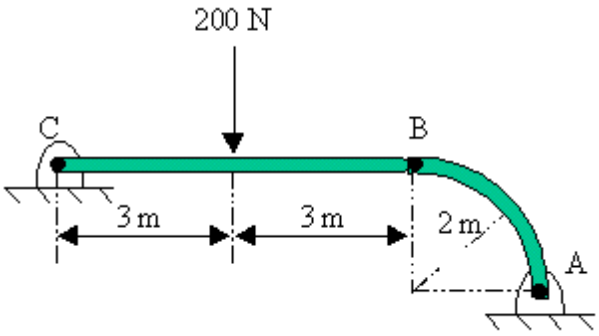


One answer only.

- $\Sigma M_c = 0$
- $\Sigma M_B = 0$
- $\Sigma F_x = 0$
- None of the above

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2) On a sheet of paper draw the free- body diagram of member BC, then specify the single equation of equilibrium that should be applied to determine the resultant force acting at the ends of the two- force member AB.

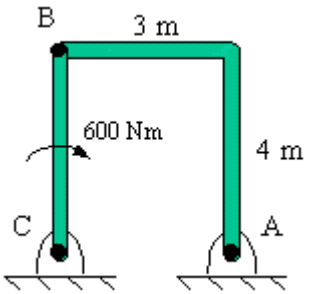


One answer only.

- $\Sigma M_B = 0$
- $\Sigma F_y = 0$
- $\Sigma M_c = 0$
- None of the above

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3) Is member BC a two- force member?



One answer only.

- Yes
- No

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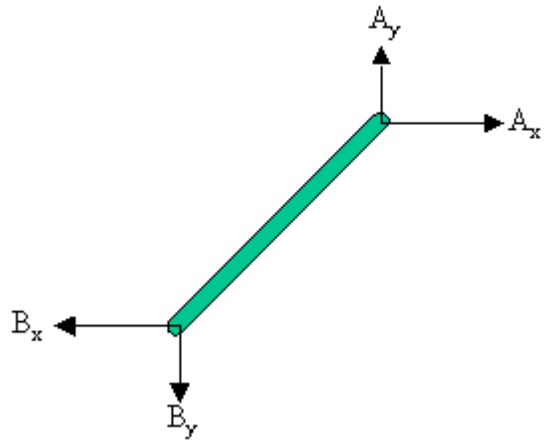
4) cont....Is it necessary to specify where the 600 Nm couple moment acts on member BC?

One answer only.

- Yes
- No

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5) Is this a two- force member?



One answer only.

- Yes
- No

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