

21-S-5-5-AG-077

A smooth leaning rod with a uniform mass is supported by a ball-and-socket joint at point A, the wall at point B, and a cable BC. Which forces are present on the diagram? Assume the wall is friction-less.

- | | |
|-------------|-------------|
| a) A_x | l) M_{Ax} |
| b) A_y | m) M_{Ay} |
| c) A_z | n) M_{Az} |
| d) B_x | o) M_{Bx} |
| e) B_y | p) M_{By} |
| f) B_z | q) M_{Bz} |
| g) C_x | r) M_{Cx} |
| h) C_y | s) M_{Cy} |
| i) C_z | t) M_{Cz} |
| j) T_{BC} | u) mg |
| k) N_B | |

Which equilibrium equation do you need to consider to solve for reaction components?

- a) $\sum M_A = 0$
- b) $\sum M_B = 0$
- c) $\sum M_C = 0$

ANSWER:

- | | |
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