



A rod is pushed by an engineer with force magnitudes of F_B and F_C . Find the total moment formed about point A as a result of F_B and F_C . Assume that the rod pivots about point A.

What are the magnitudes and directions of the moment vectors formed by F_B and F_C about point A?

$$|(M_B)_A| = d_1 F_B \cos(\theta_B)$$

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$$|(M_C)_A| = (d_1 + d_2) F_C \cos(\theta_C)$$

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What is the magnitude of the total moment formed about point A by the engineer?

$$|(M_{Total})_A| = |(M_B)_A| + |(M_C)_A|$$