

ПРОСТРАНСТВЕННАЯ СТАТИКА.

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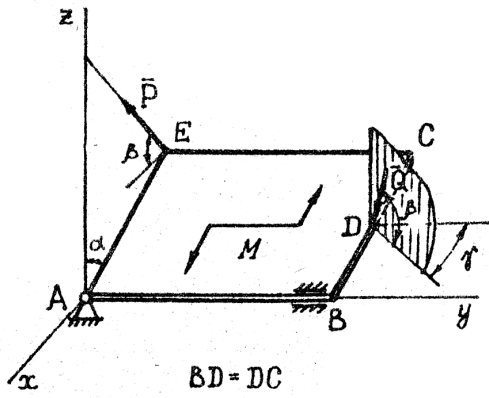
Курсовая работа состоит из двух задач, в которых рассматриваются системы твердых невесомых тел, находящихся под действием произвольной пространственной системы сил в равновесии.

Задача первая. Определить реакции сферического шарнира или подпятника A и подшипника B . Дополнительно в задачах вариантов 5, 14, 17, 21, 28, 29 и 30 определить реакцию опоры K , в задачах 10 и 27 реакции стержня KC , а в остальных задачах необходимую для равновесия силу Q .

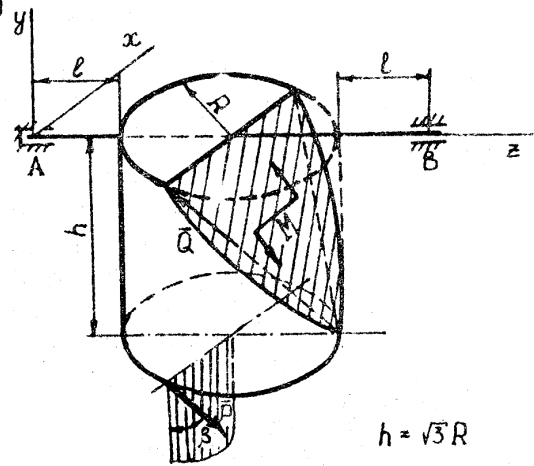
На схемах углы α и β отсчитываются в вертикальных плоскостях, а углы γ и φ в горизонтальных. Принять как заданные величины P и l , при этом $l_1 = 2l$, $R = 2r = l$, $M = 0,5Pl$, в задачах вариантов 1, 3, 5, 7, 8, 9, 11, 13, 14, 17, 21, 23, 24, 26, 27 и 28 принять $AB = 2BC = 2l$, $\alpha = \gamma = 30^\circ$, $\beta = \varphi = 60^\circ$.

Задача вторая. Определить реакцию заделки, если заданы P и l , пара сил с моментами $M = 3Pl$, $q_0 = 3Pl$, $AB = BC = CD = DE = l$, $\alpha = 30^\circ$, $\beta = 60^\circ$.

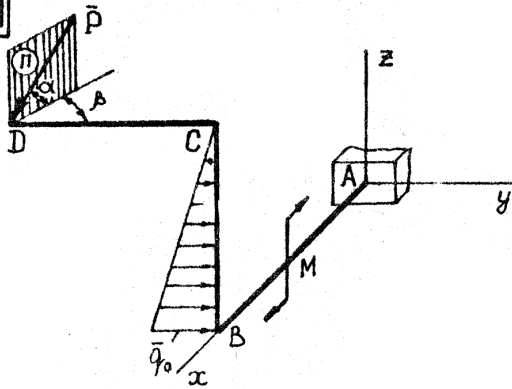
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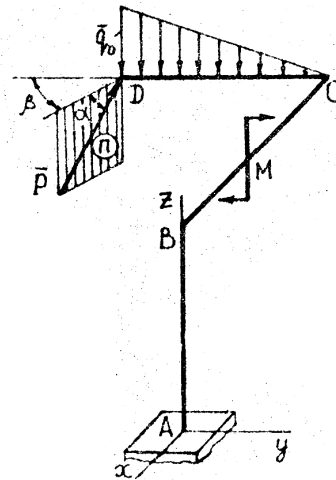
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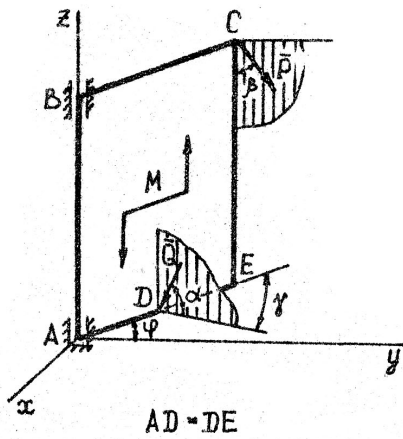
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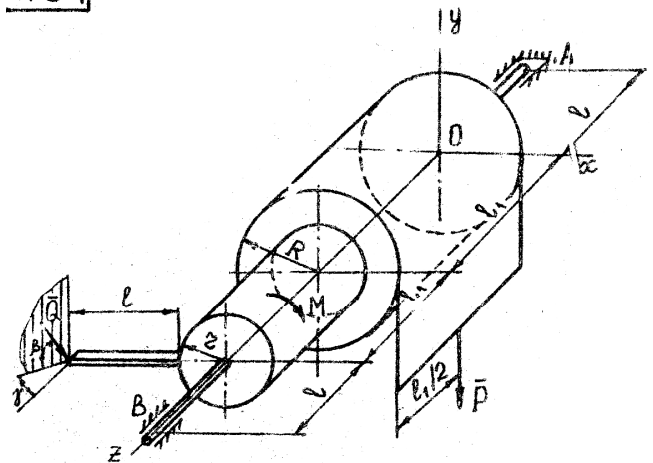
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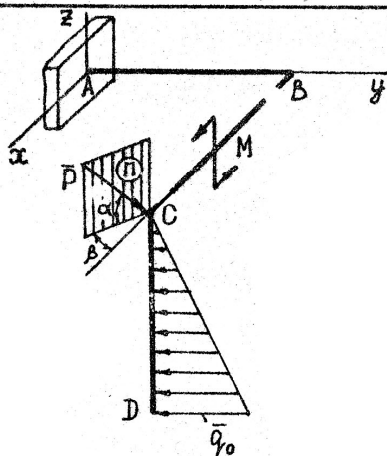
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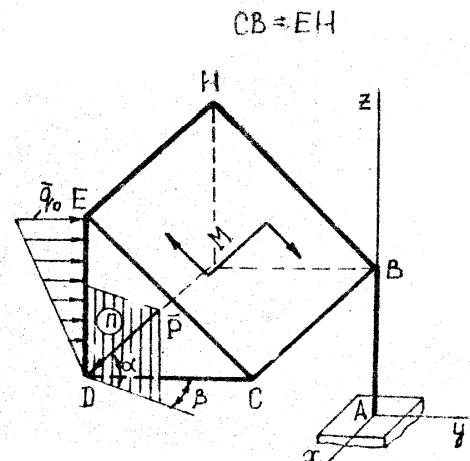
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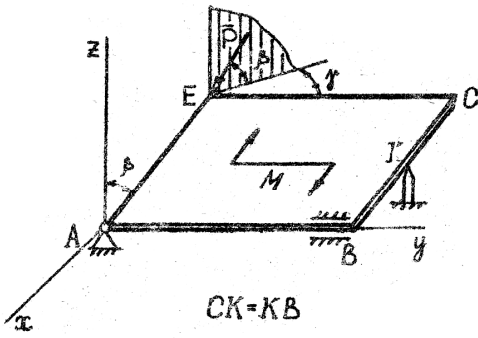
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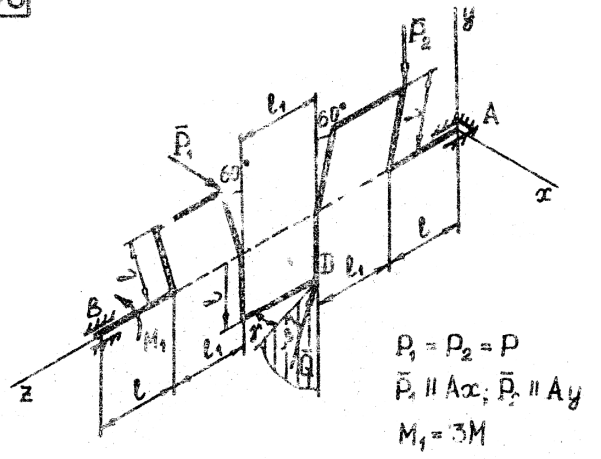
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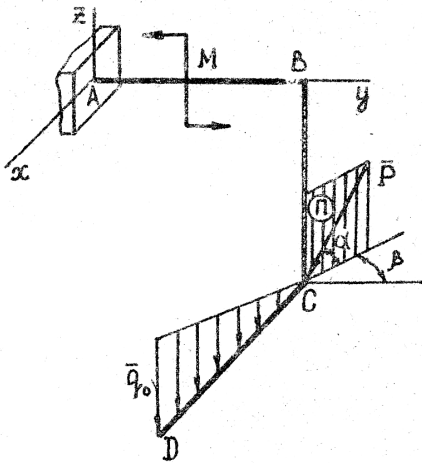
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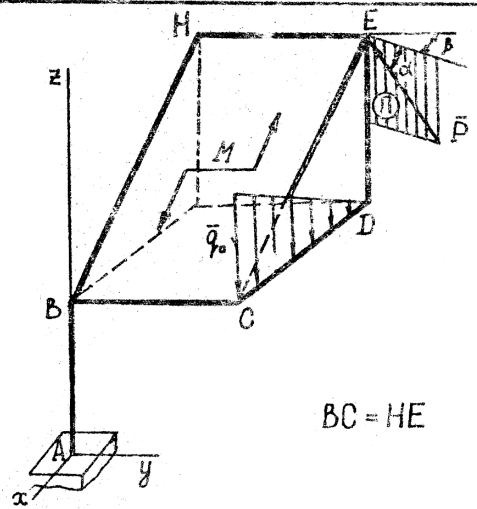
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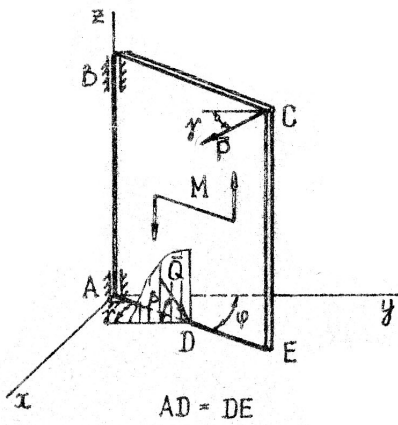
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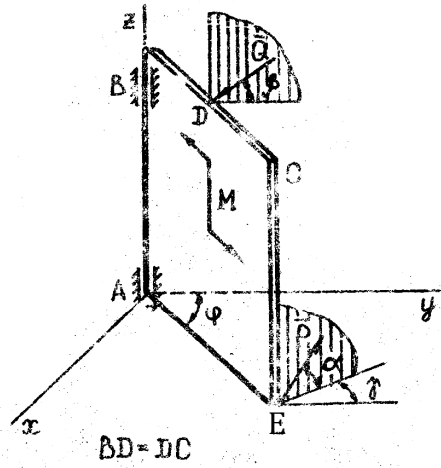
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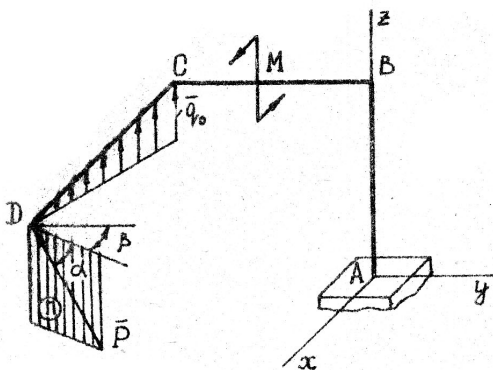
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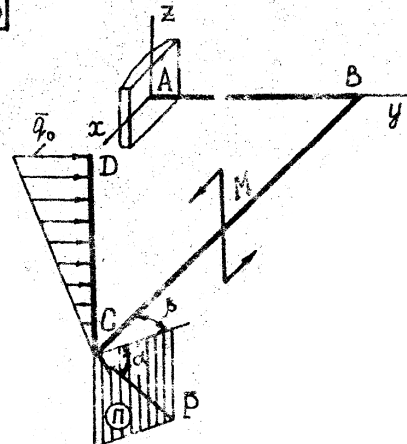
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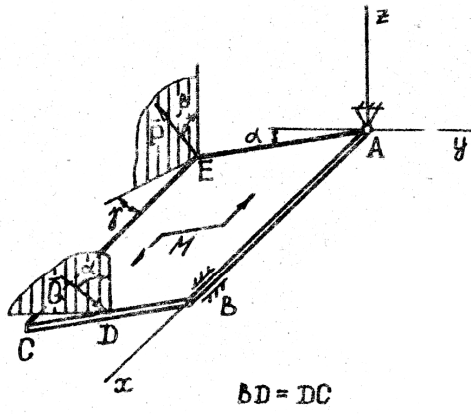
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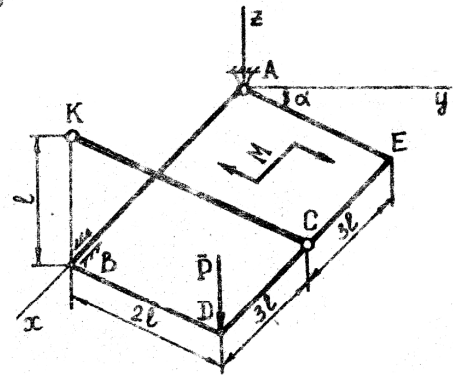
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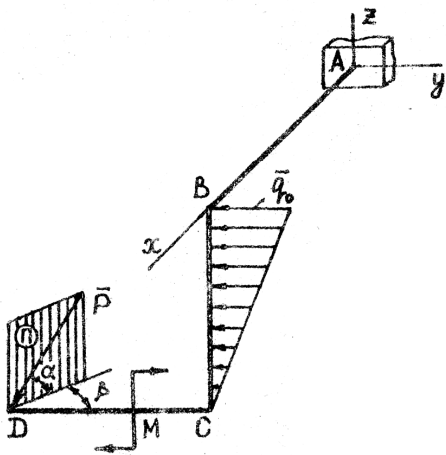
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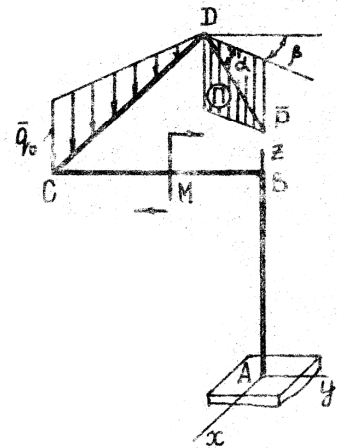
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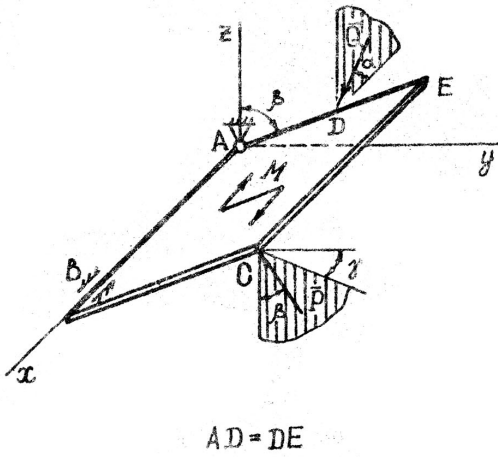
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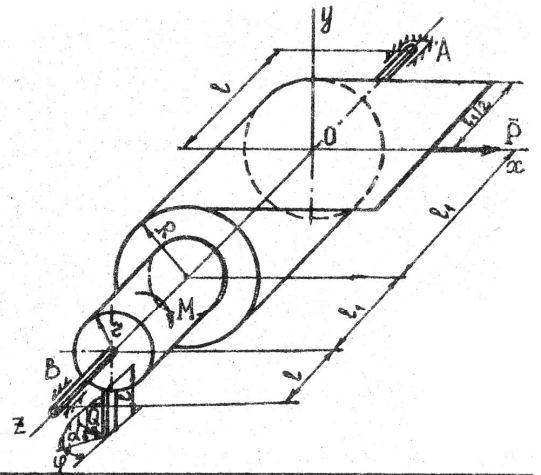
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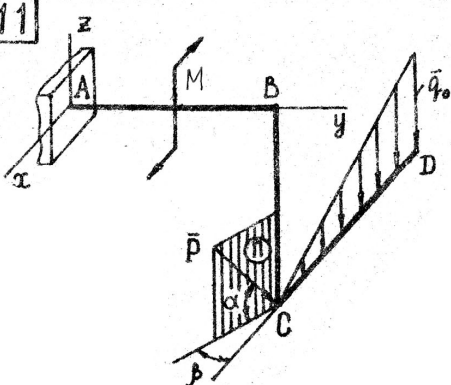
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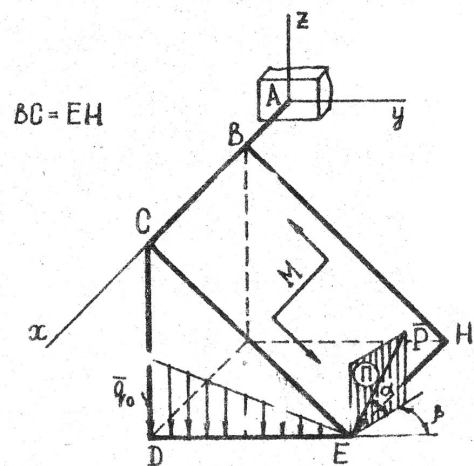
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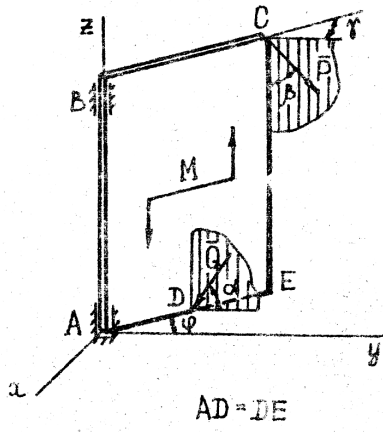
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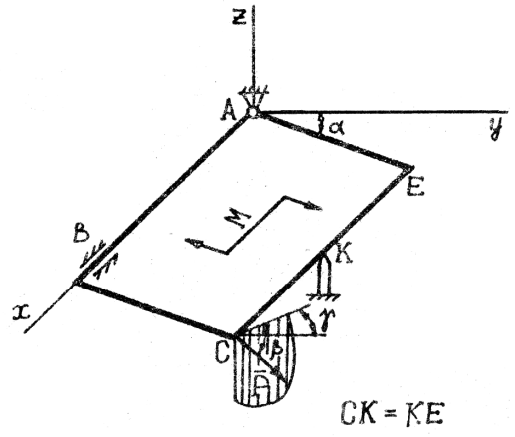
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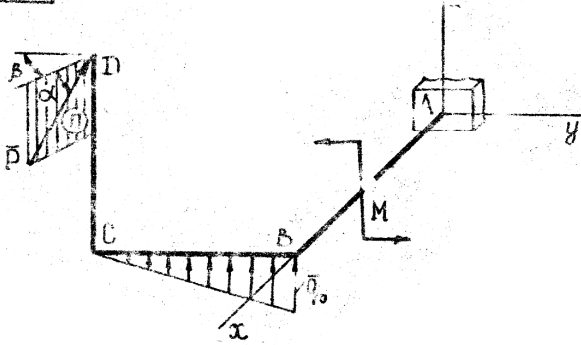
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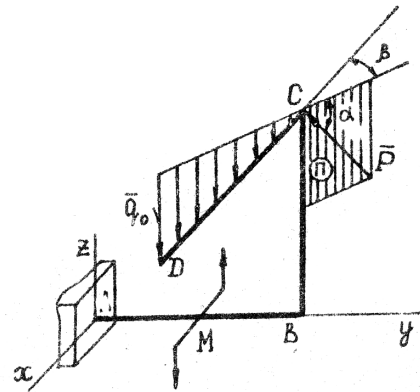
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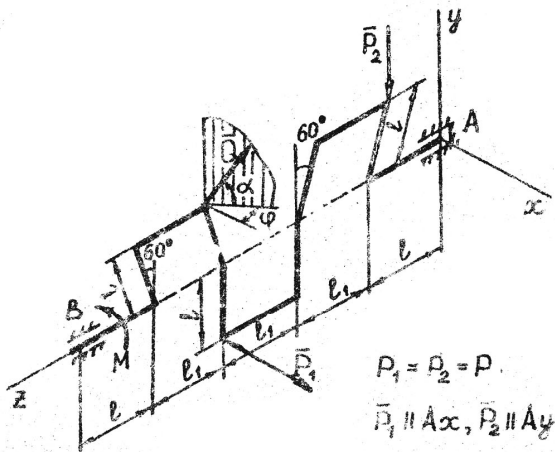
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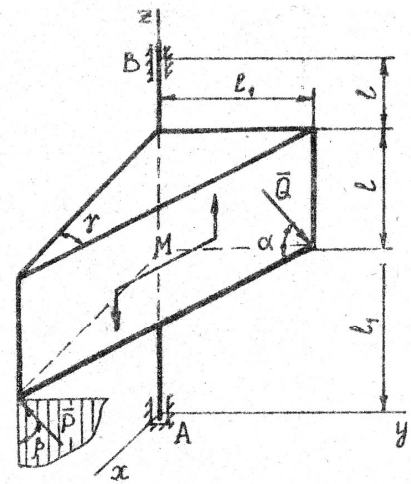
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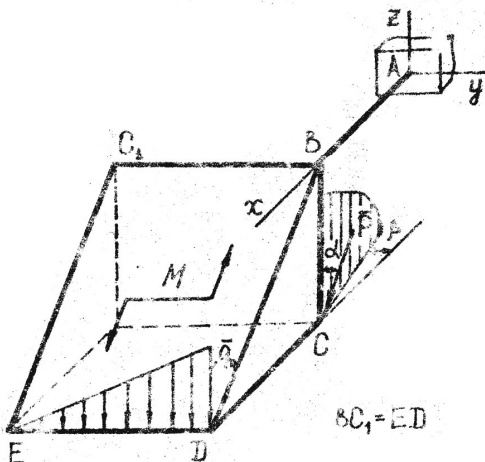
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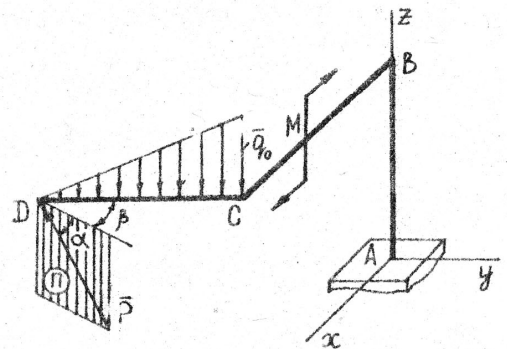
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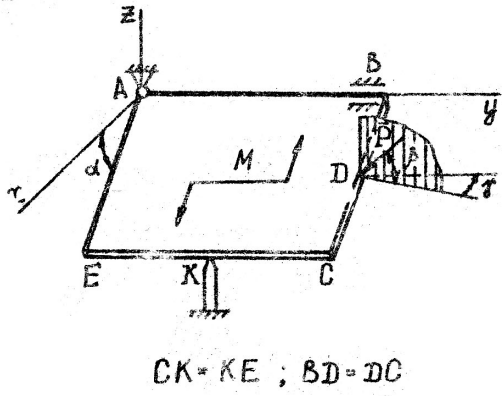
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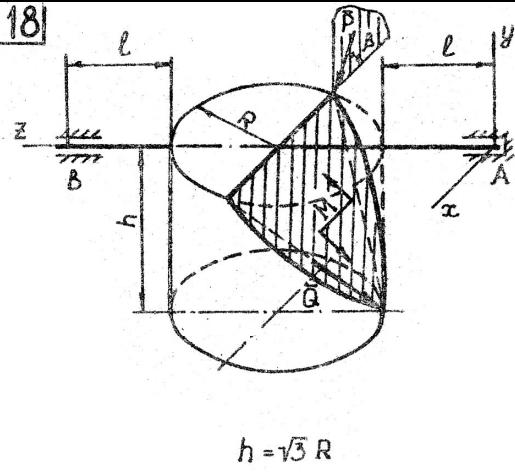
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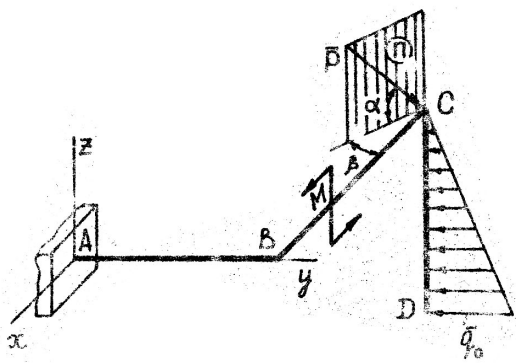
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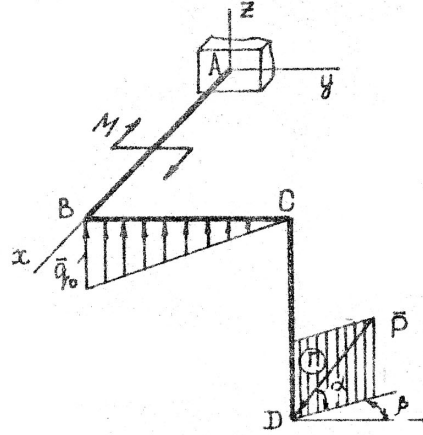
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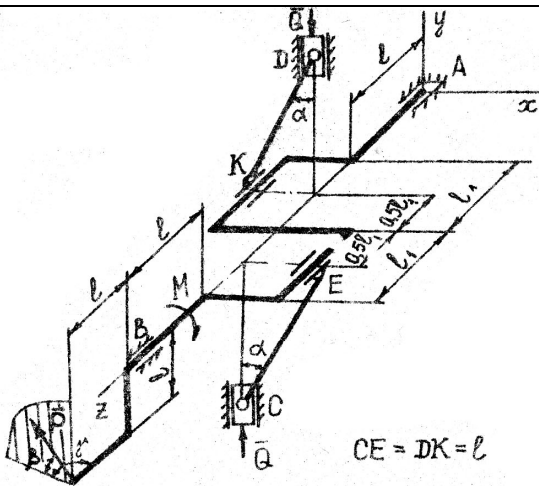
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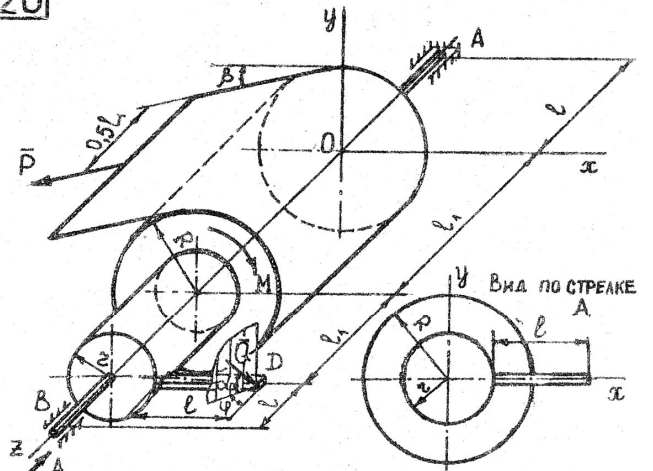
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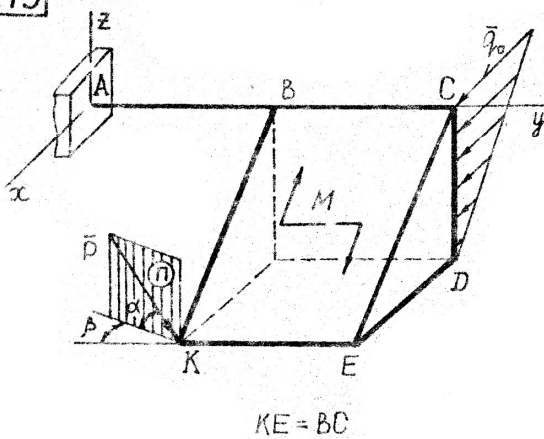
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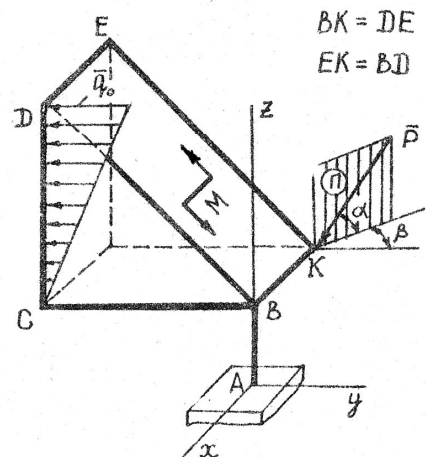
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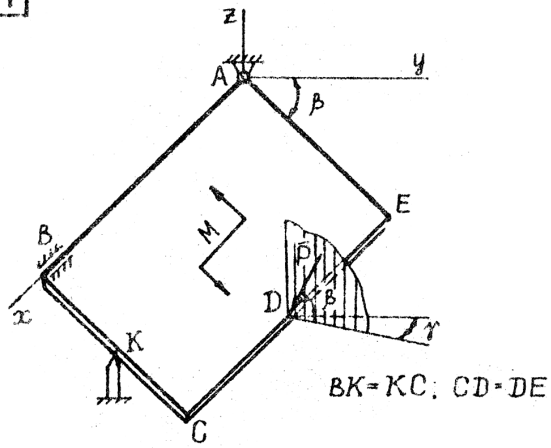
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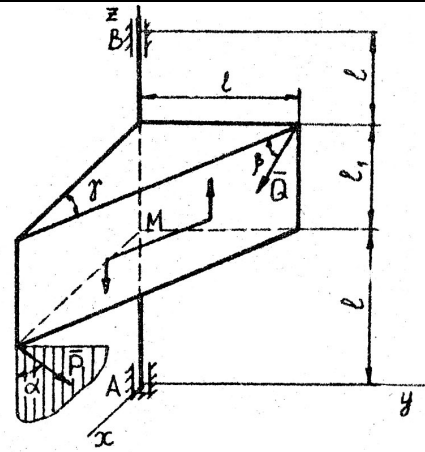
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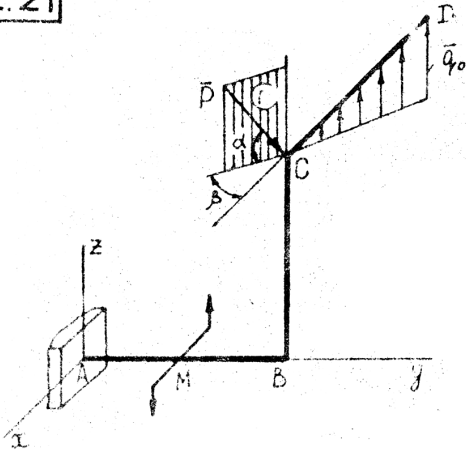
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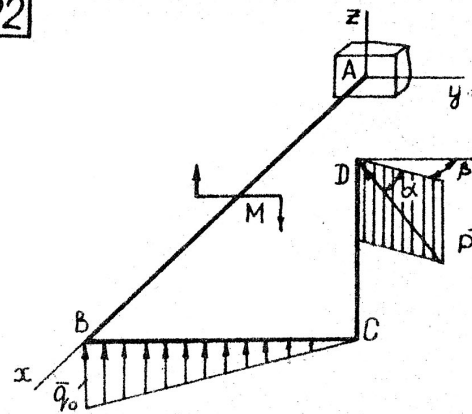
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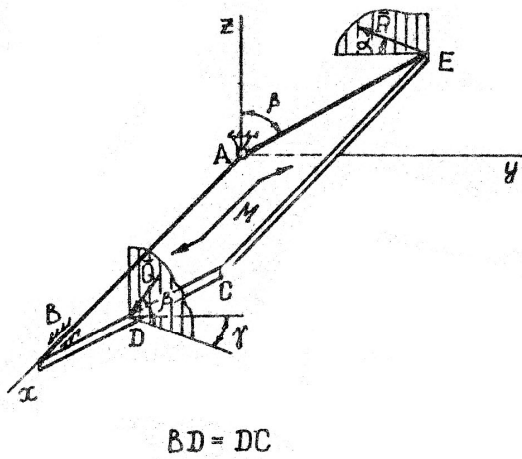
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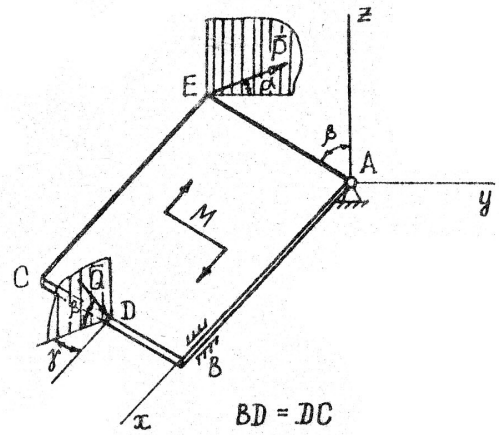
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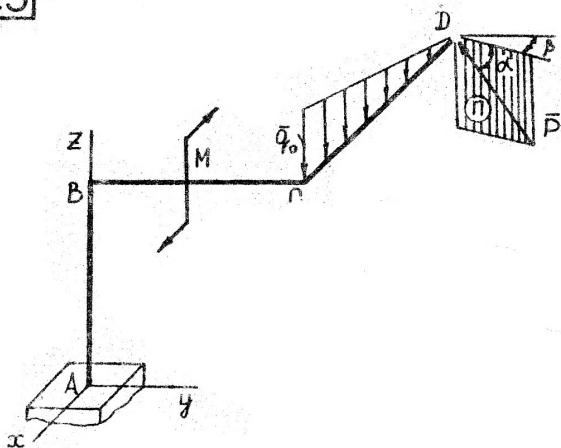
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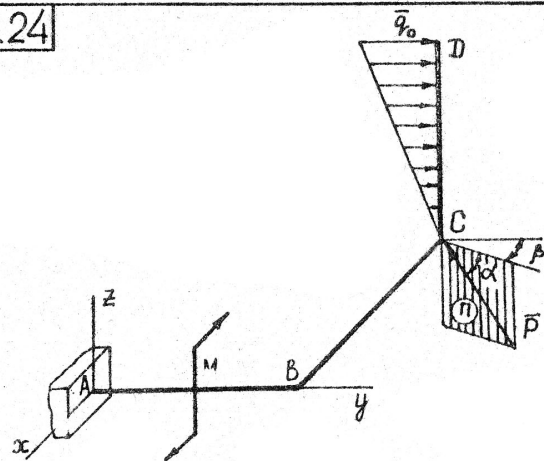
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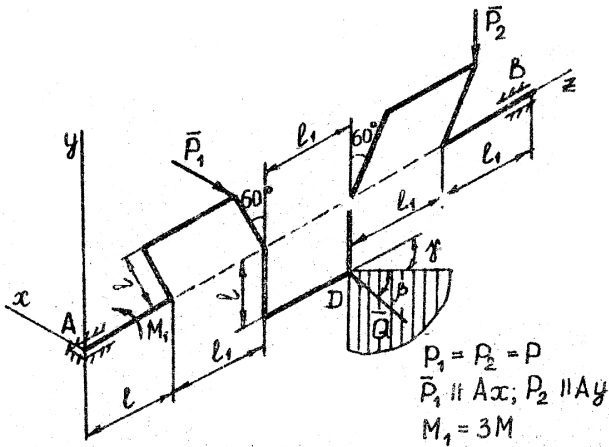
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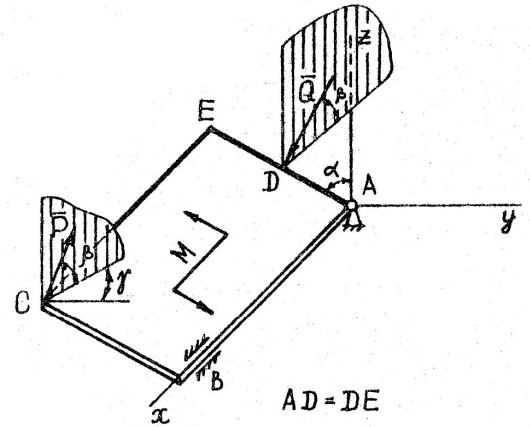
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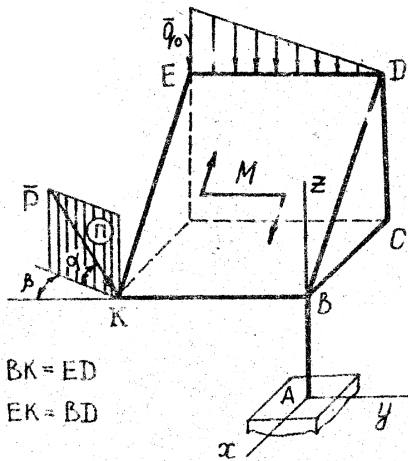
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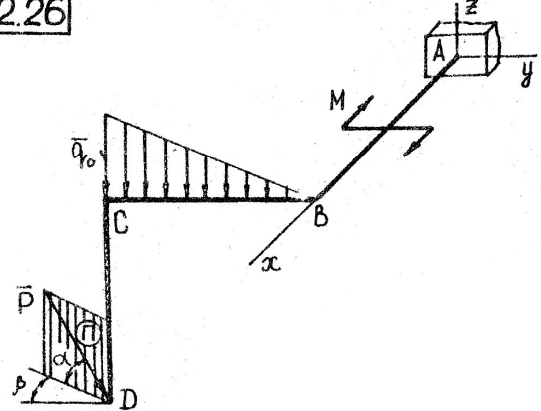
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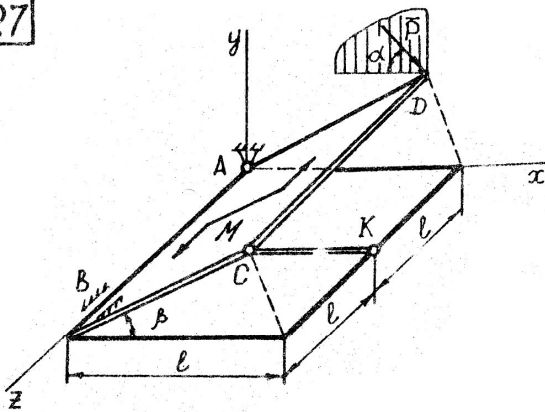
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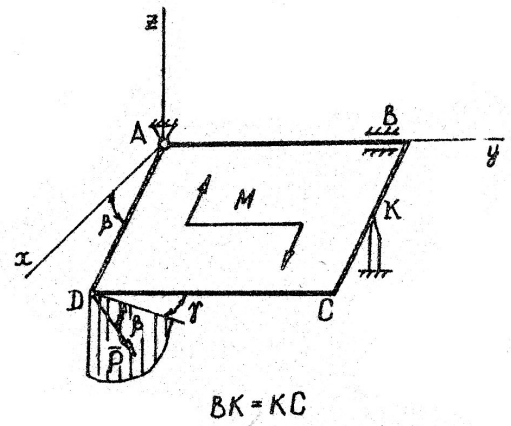
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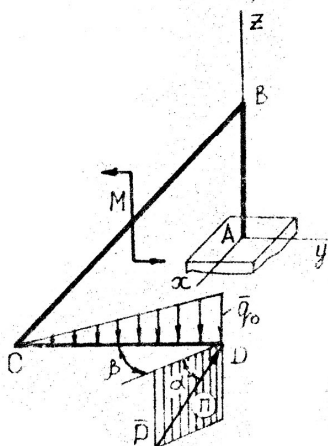
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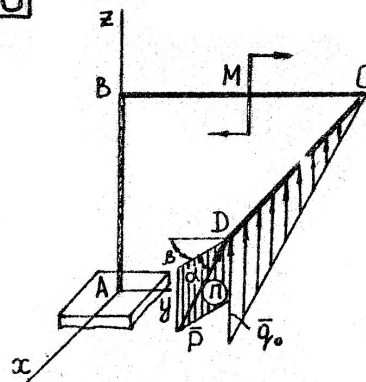
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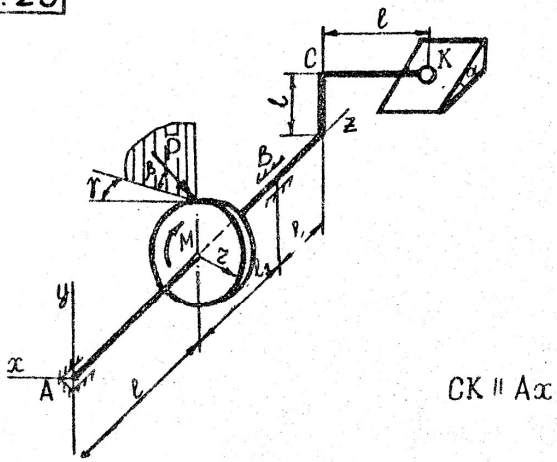
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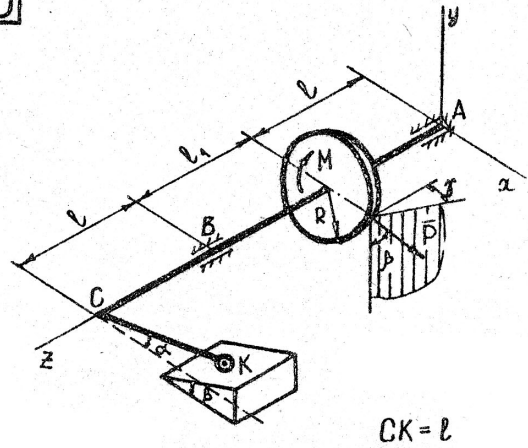


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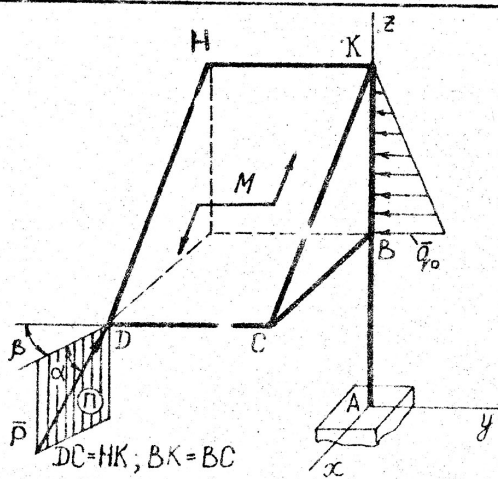
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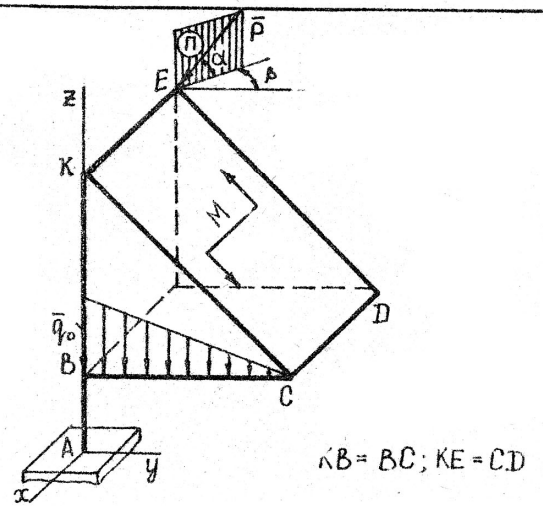
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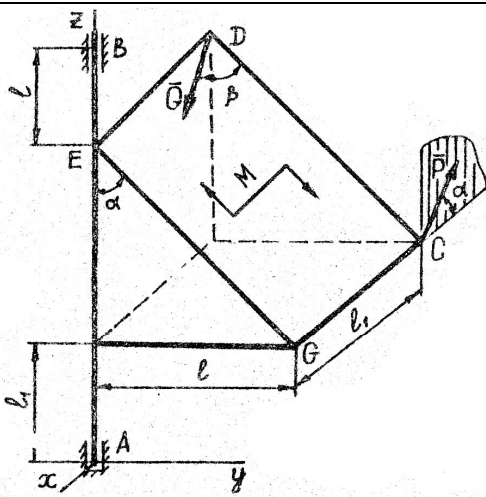
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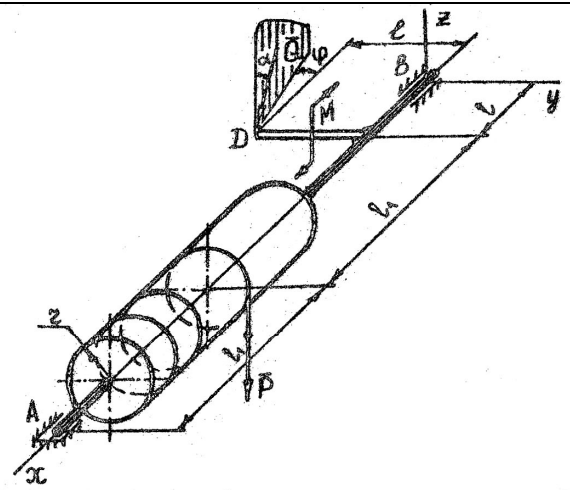


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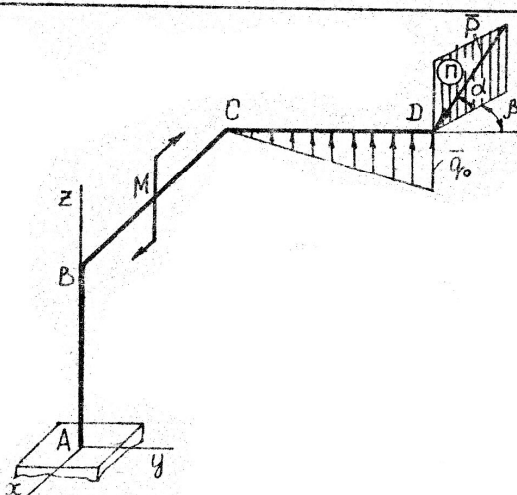
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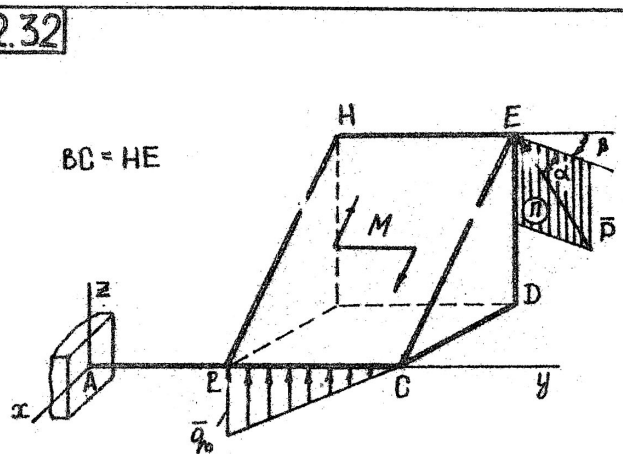
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2.31



2.32



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