

KINEMATIČKI POSTUPAK ODREĐIVANJA U.L.

Kinematički se postupak temelji na teoremu o virtualnim pomacima:

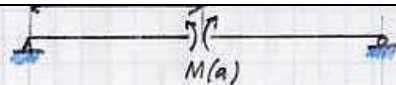
Utjecajna linija je jednaka progibnoj liniji zamišljenog sistema, nastalog raskidanjem veze koja u izvornom nosaču prenosi dotičnu veličinu, ako se na mjestu i u smjeru te veličine zada jedinični pomak (tzv. teorem Mueller-Breslaua).

Raskidanje veza-jedinični pomak

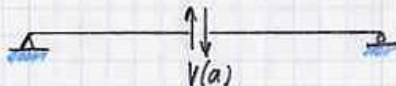
Raskidanje veza

Sila

1. Moment u $x = a$



2. poprečna sila u $x = a$



3. Uzdužna sila u $x = a$



4. Reakcija u $x = 0$



Odgovarajući pomak

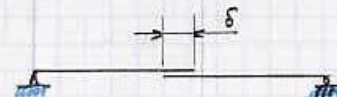
Rotacija u $x = a$



vertikalna translacija u $x = a$



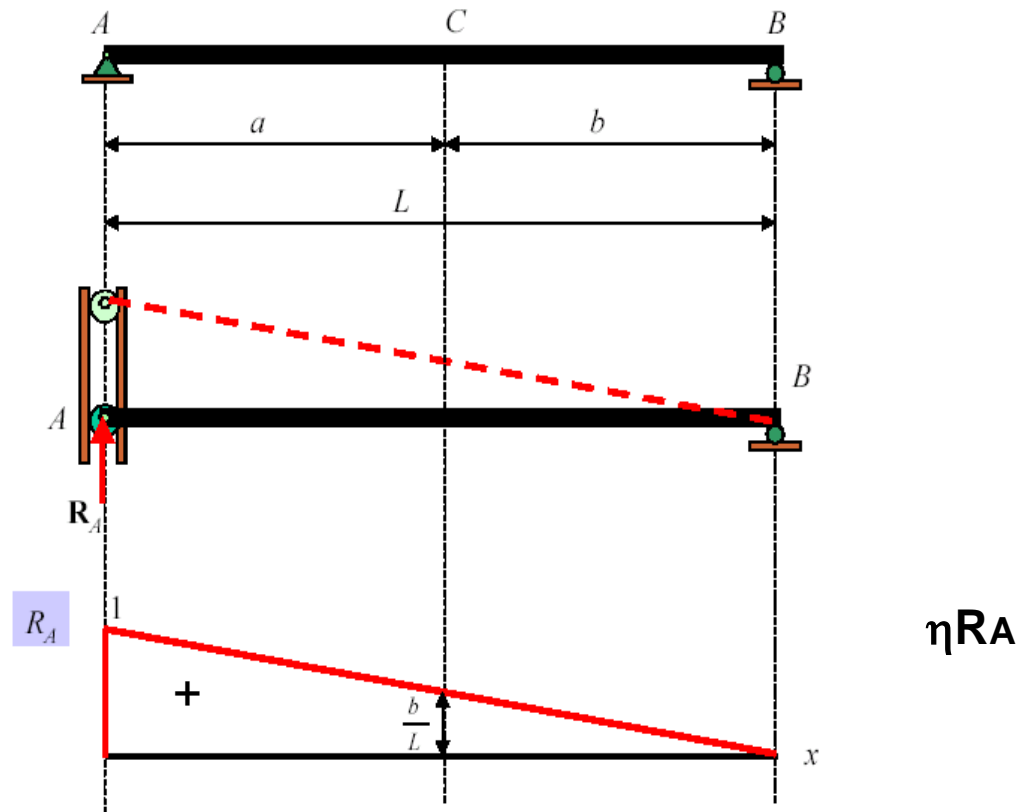
horizontalna translacija u $x = a$



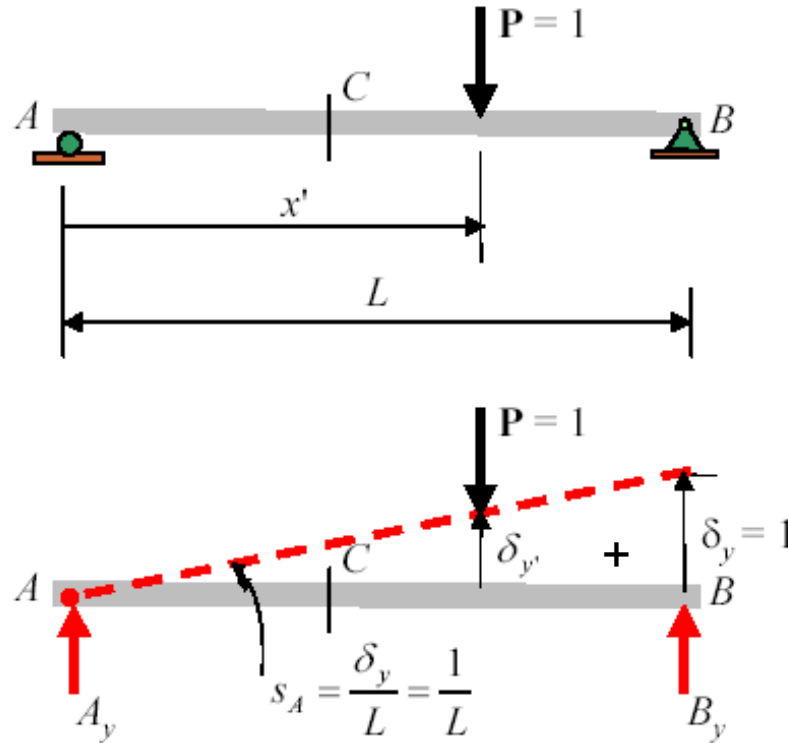
vertikalna translacija u $x = 0$



Utjecajne linije reakcija:



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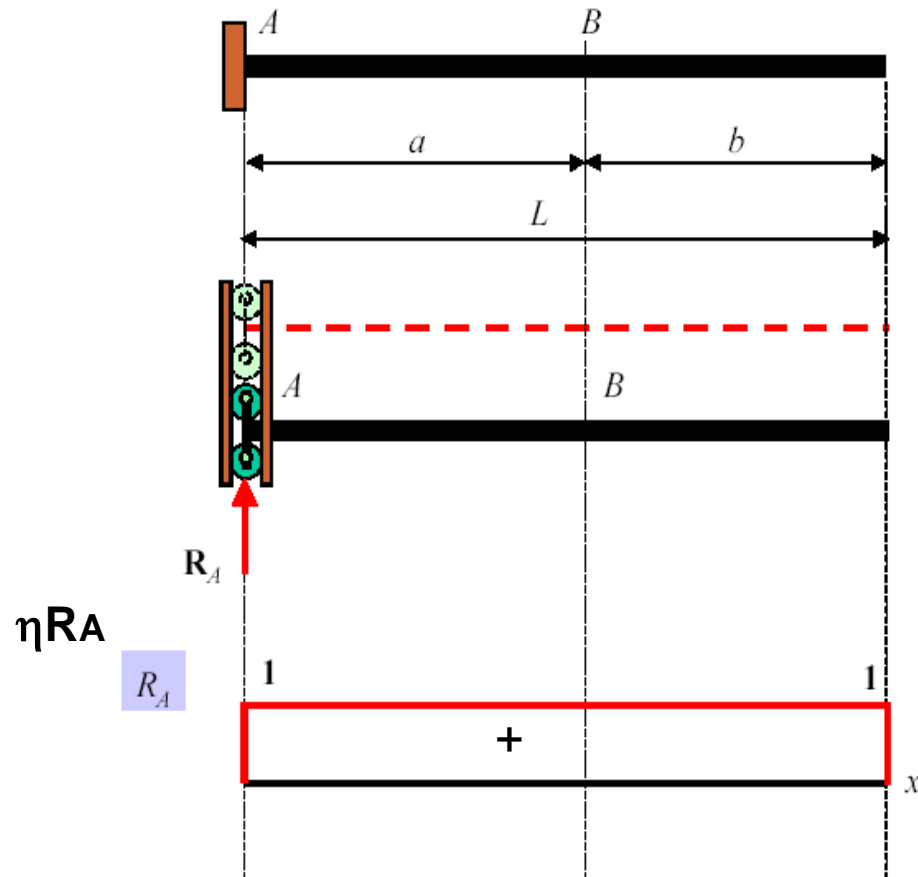


$$A_y(0) - 1(\delta_{y'}) + B_y(1) = 0$$

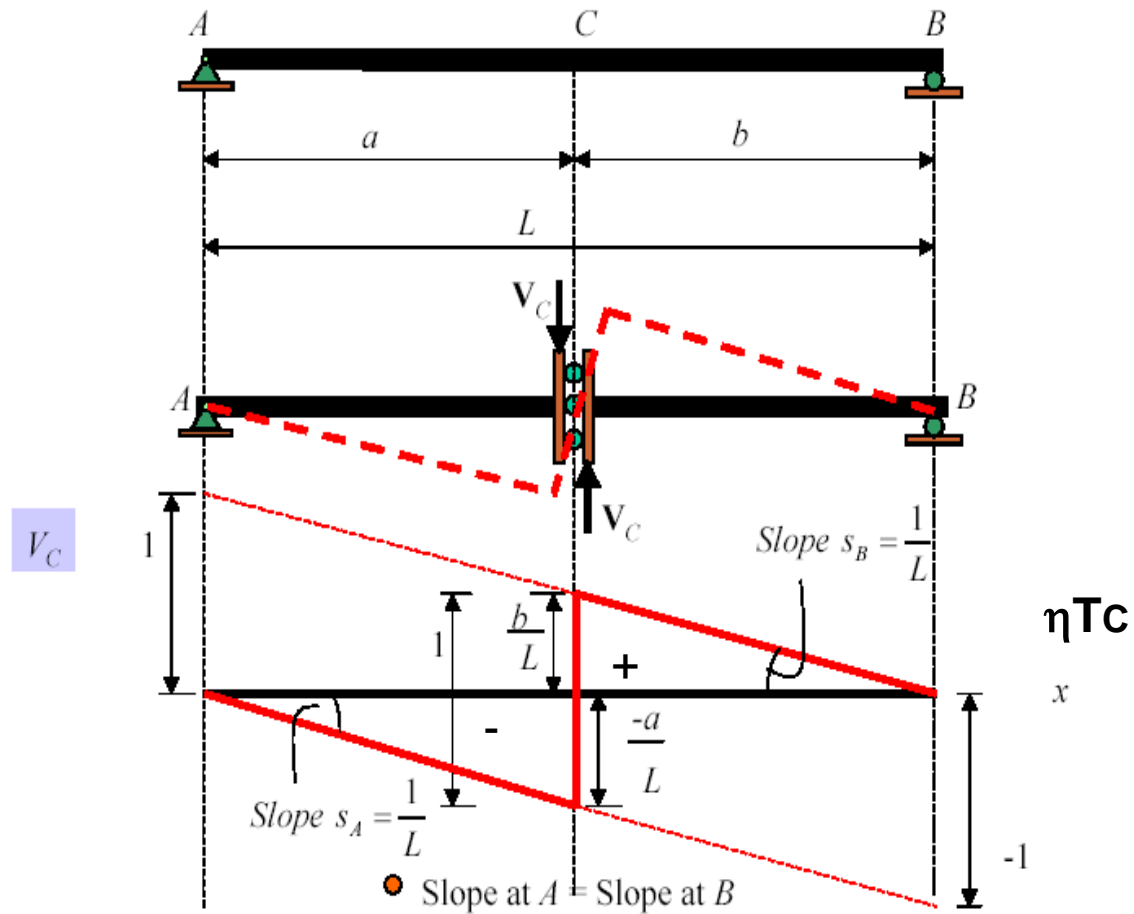
$$B_y = \delta_{y'}$$

Utjecajne linije reakcija:

Upeti ležaj :

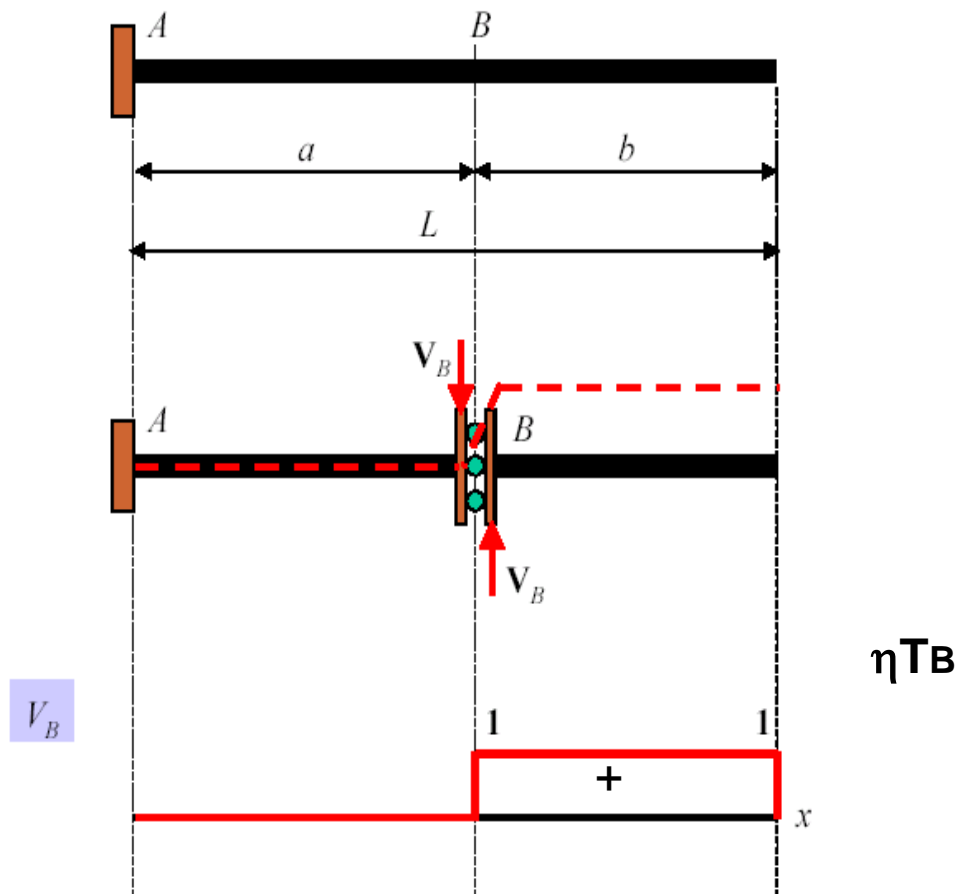


Utjecajne linije poprečnih sila:

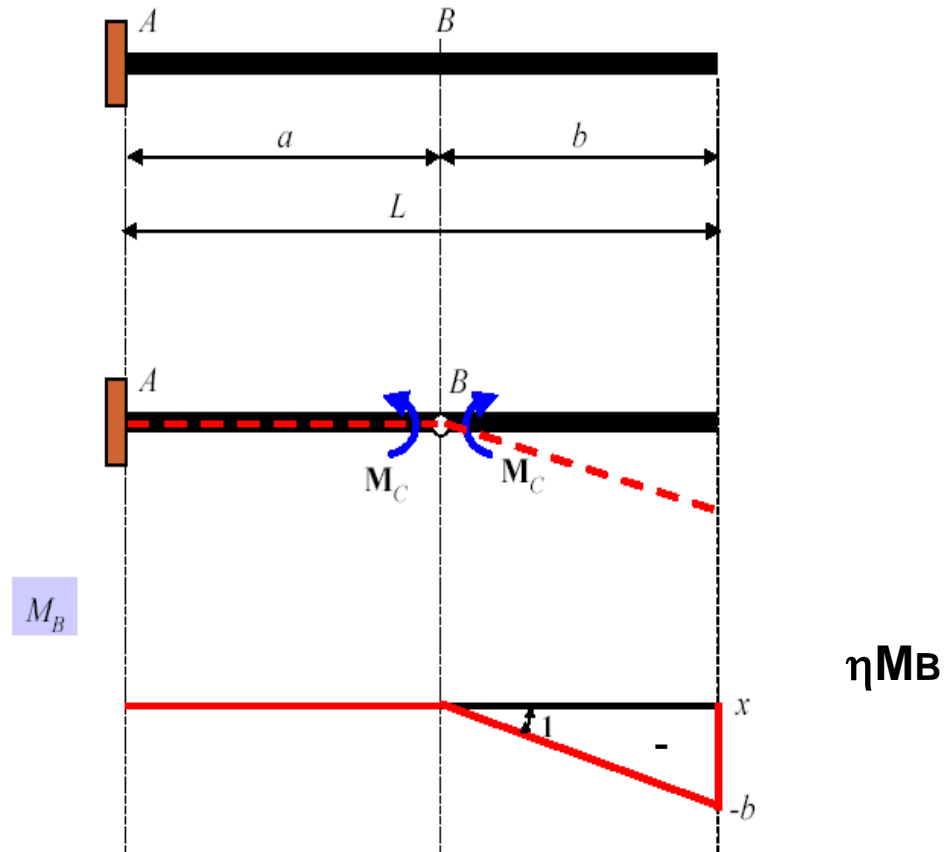


Utjecajne linije poprečnih sila:

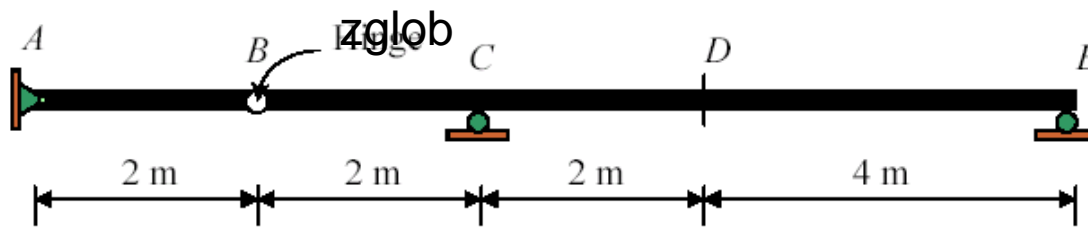
Upeti ležaj



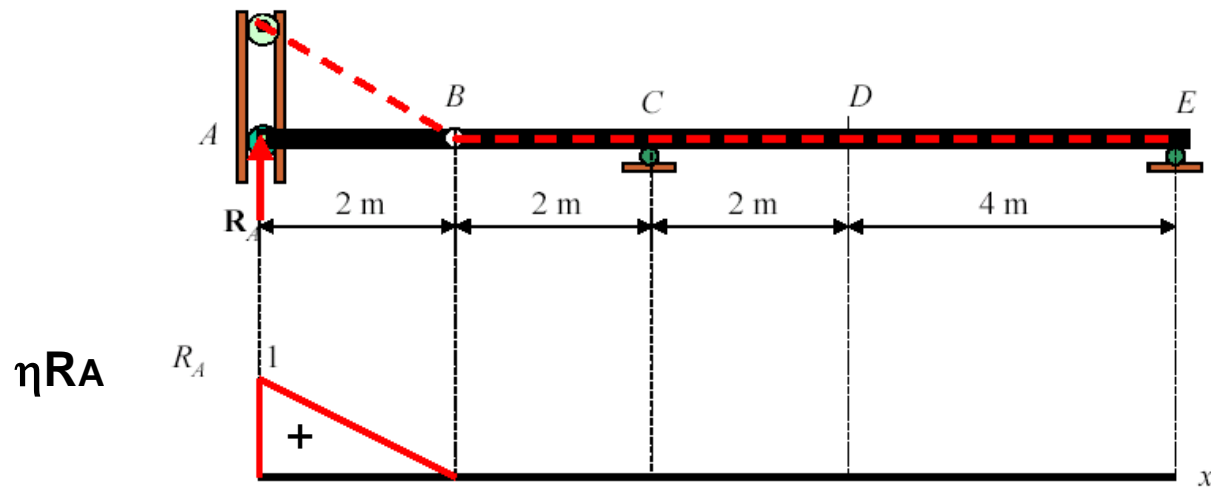
Utjecajne linije momenta savijanja:



U.L. GERBEROVIH NOSAČA

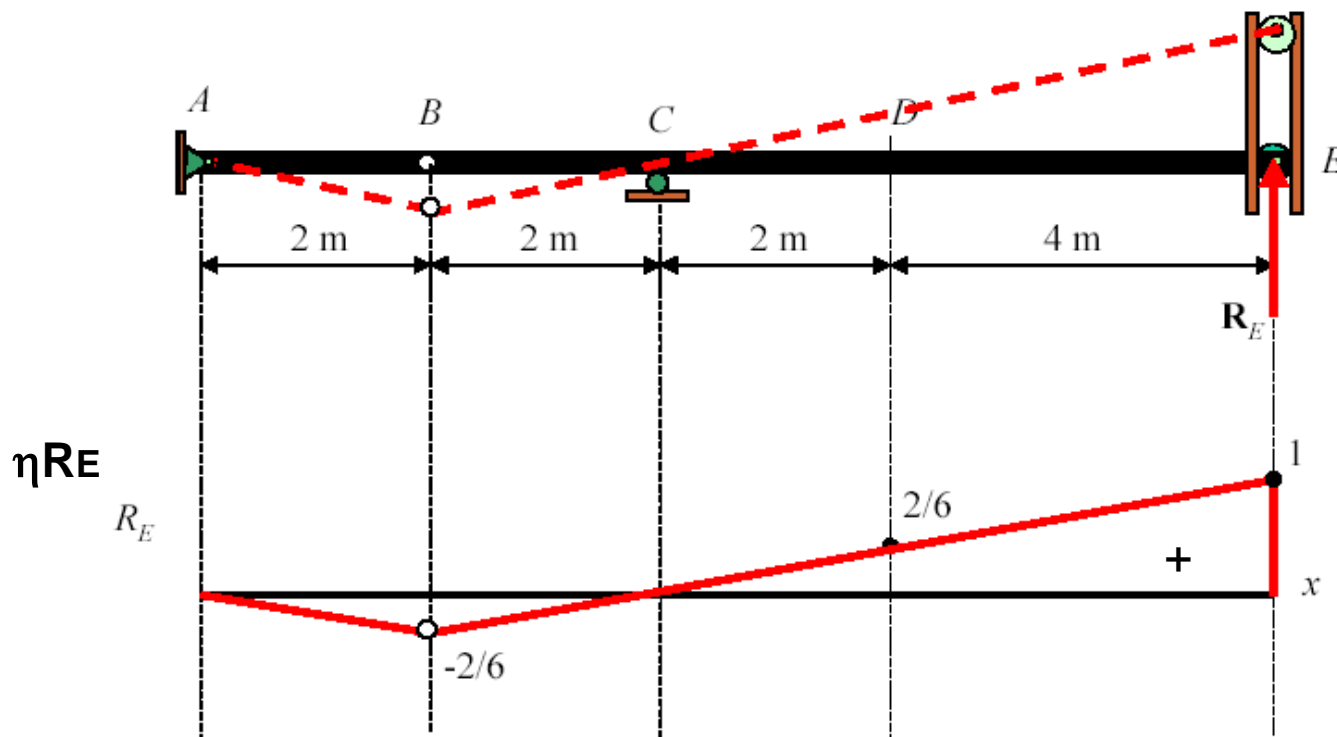


U.L. reakcija



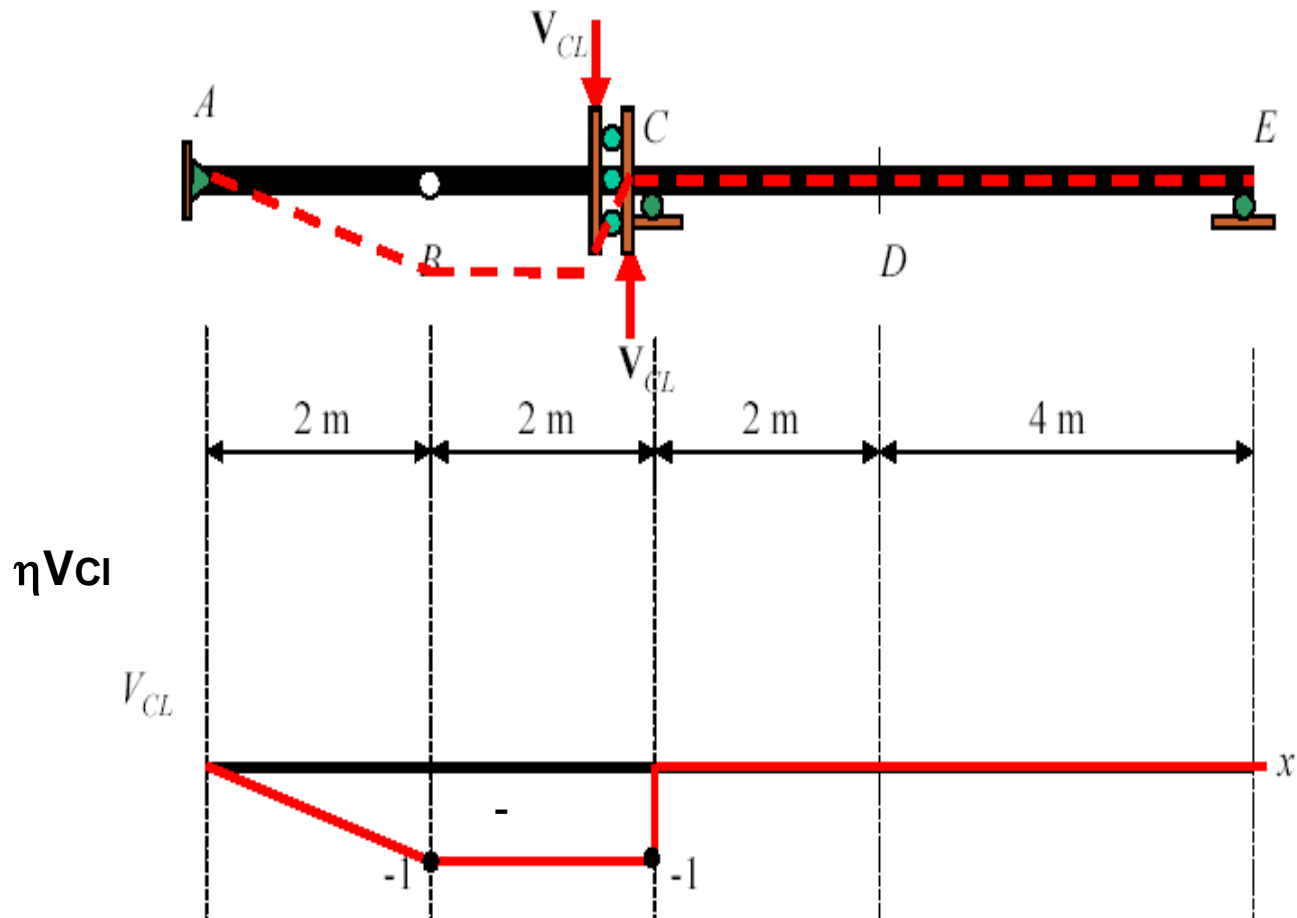
U.L. GERBEROVIH NOSAČA

U.L. reakcija



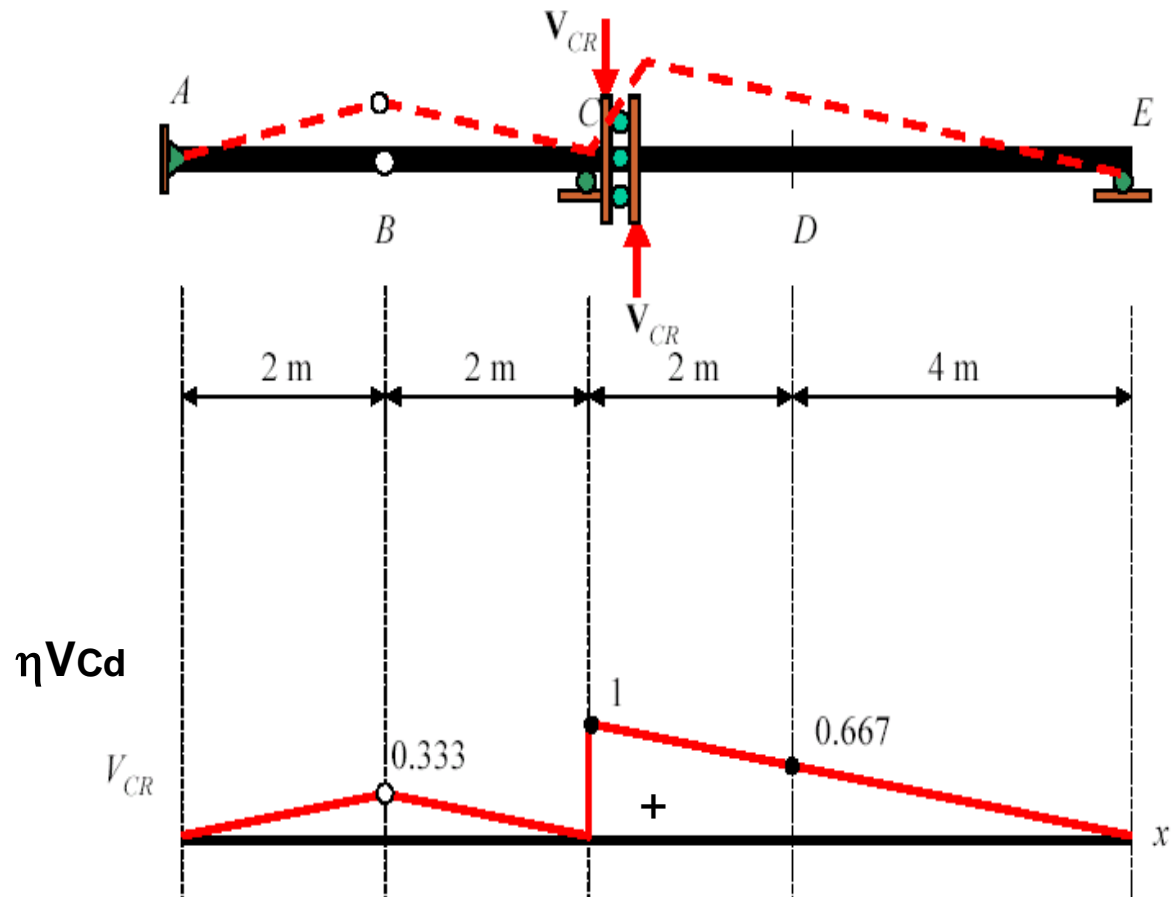
U.L. GERBEROVIH NOSAČA

U.L. za poprečne sile u nekom presjeku



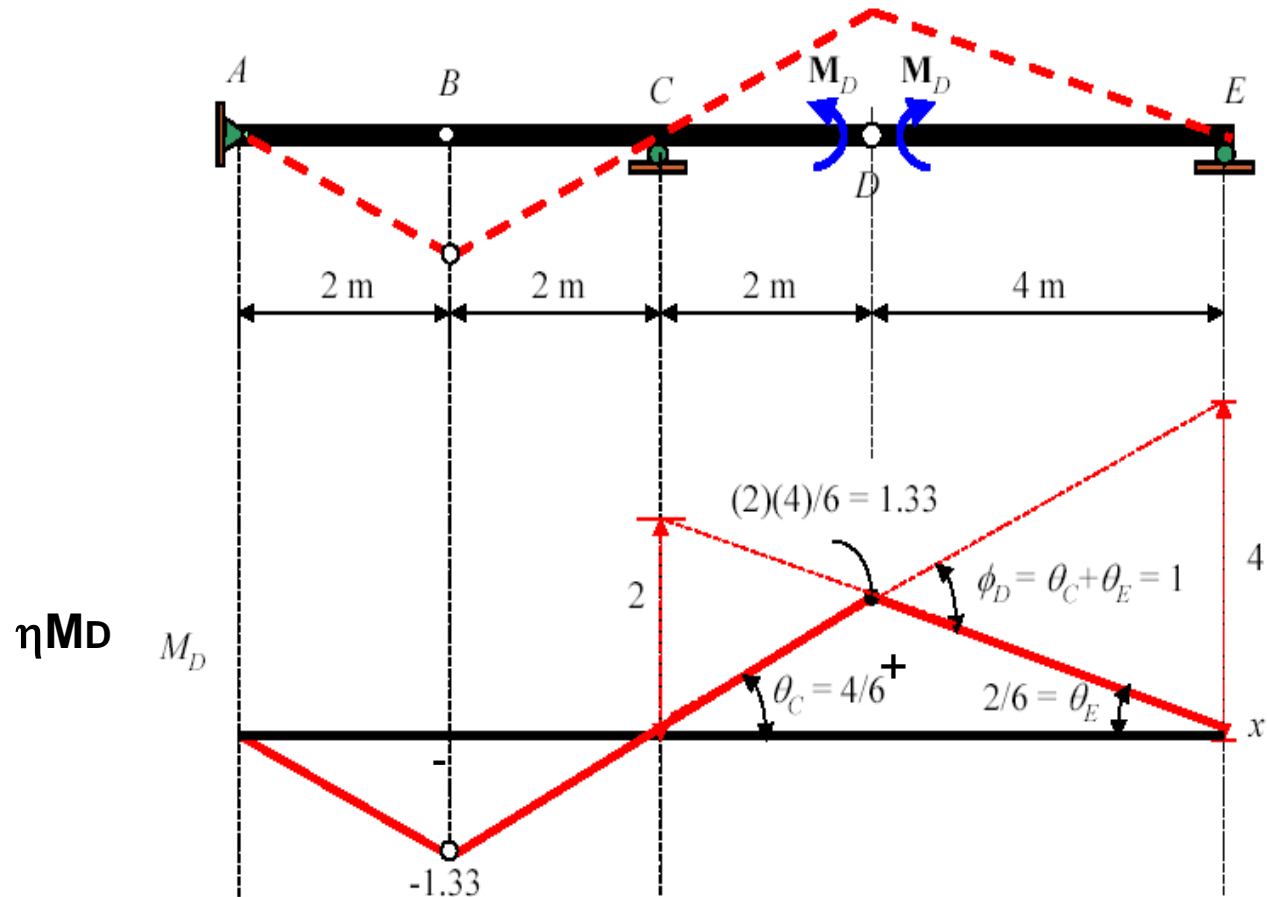
U.L. GERBEROVIH NOSAČA

U.L. za poprečne sile u nekom presjeku



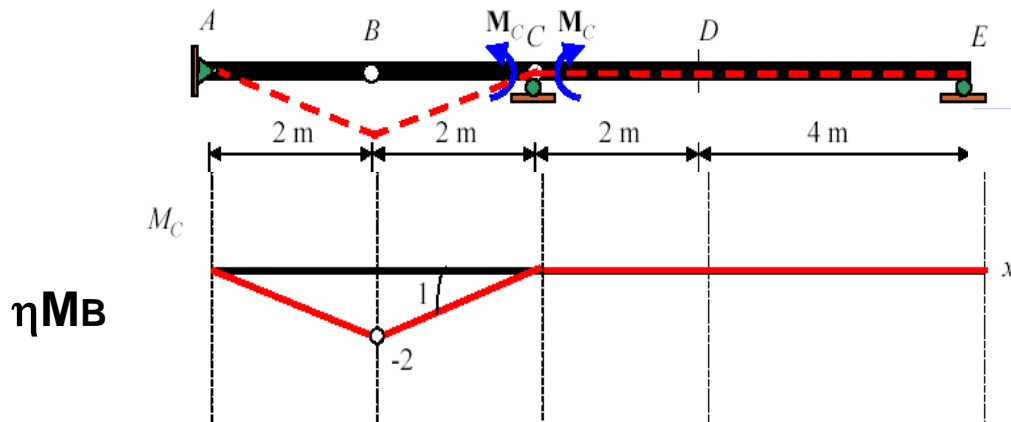
U.L. GERBEROVIH NOSAČA

U.L. za moment u nekom presjeku

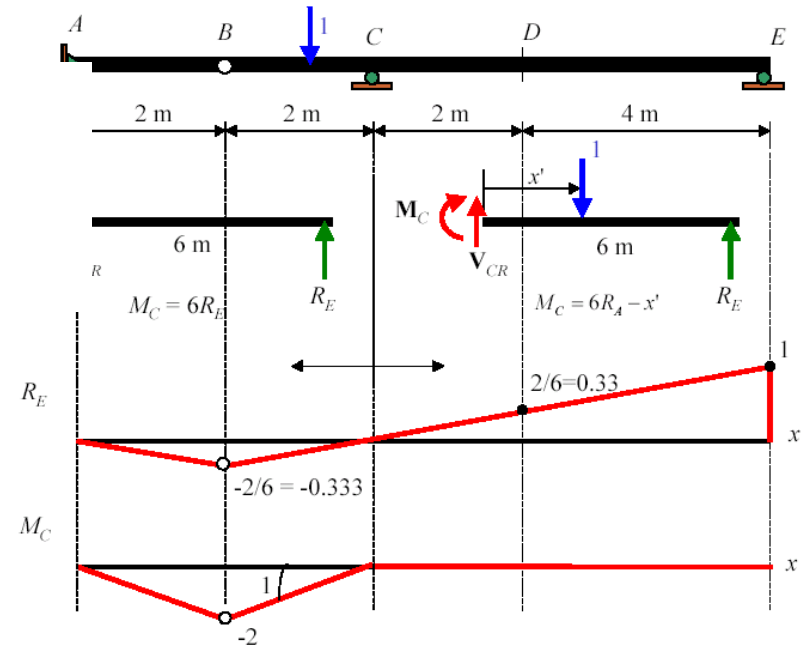


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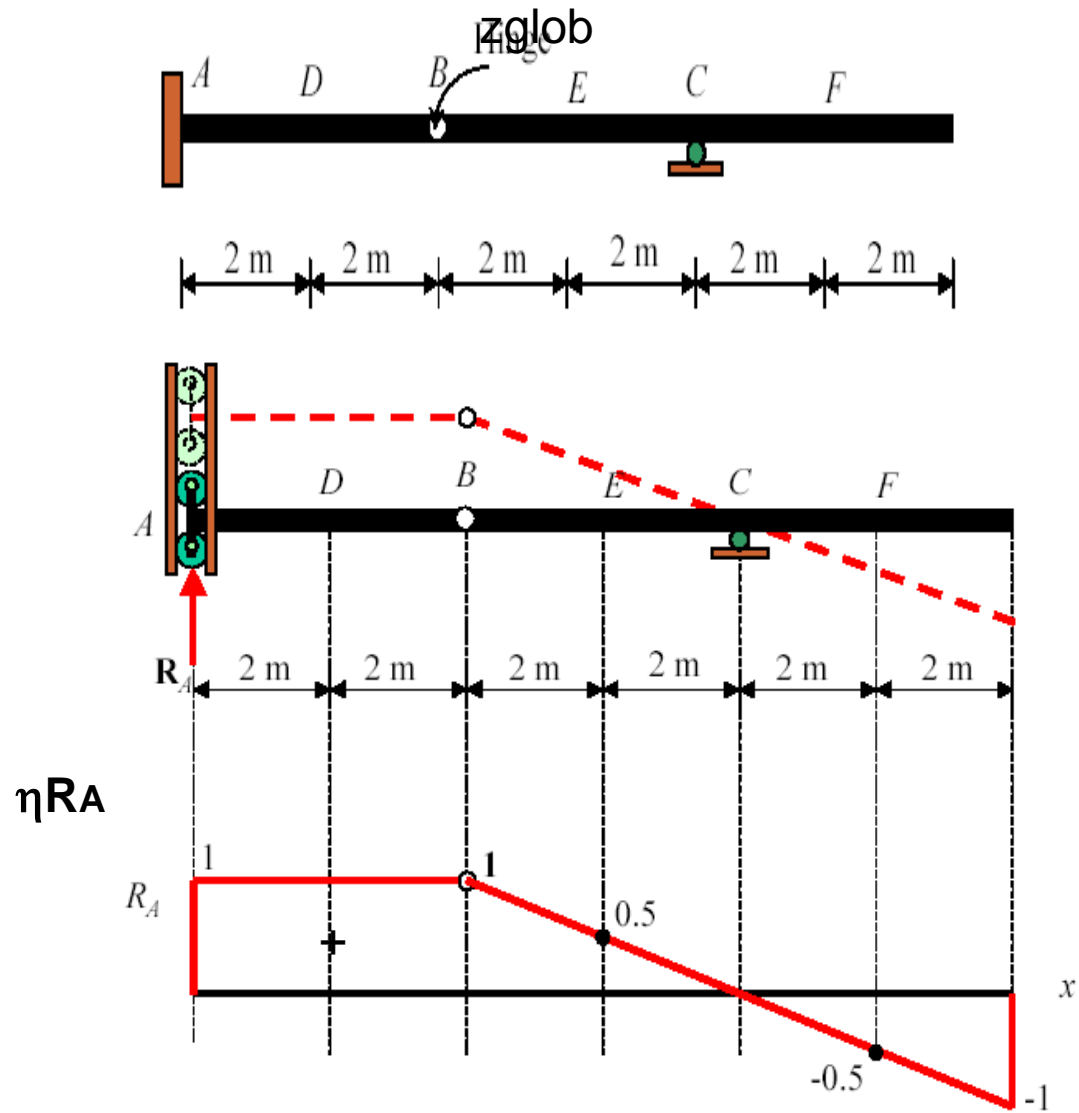
U.L. za moment u nekom presjeku



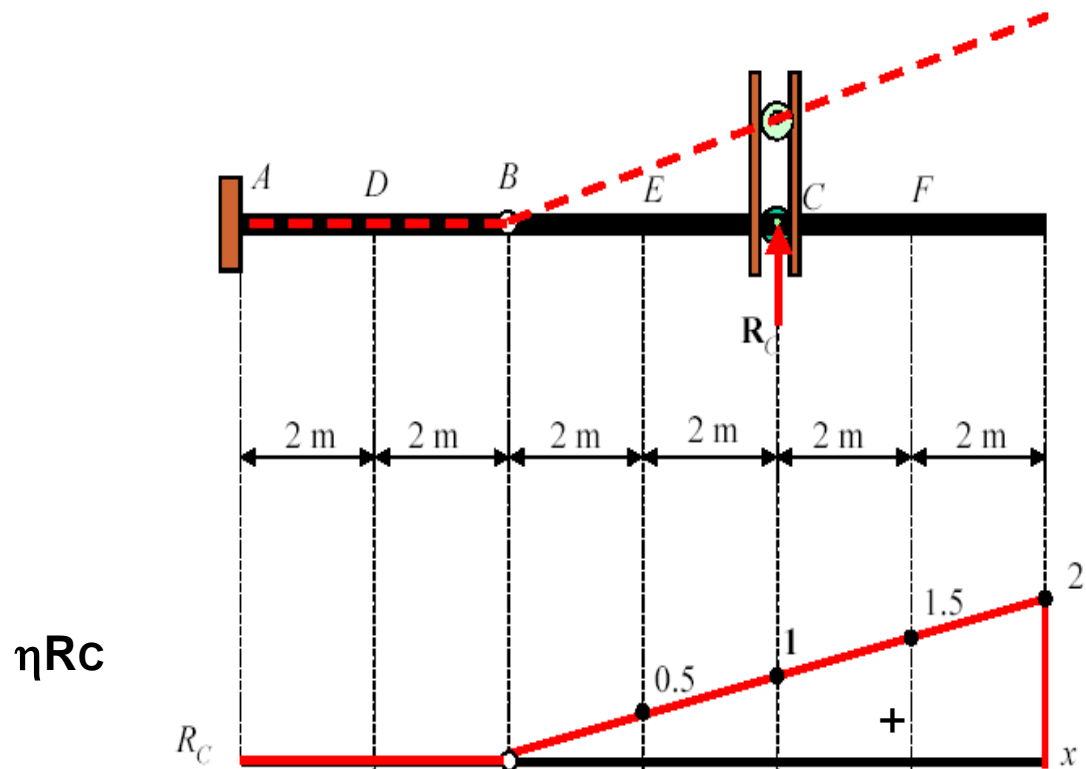
ηM_B



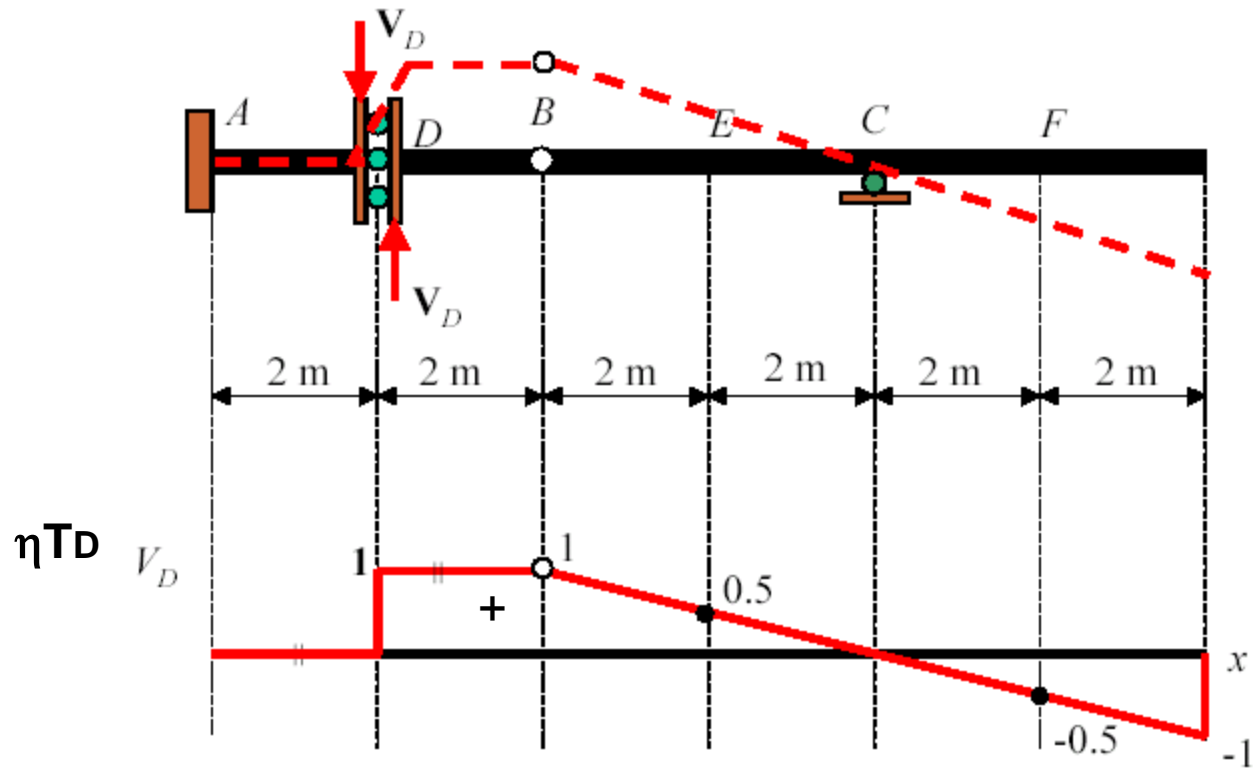
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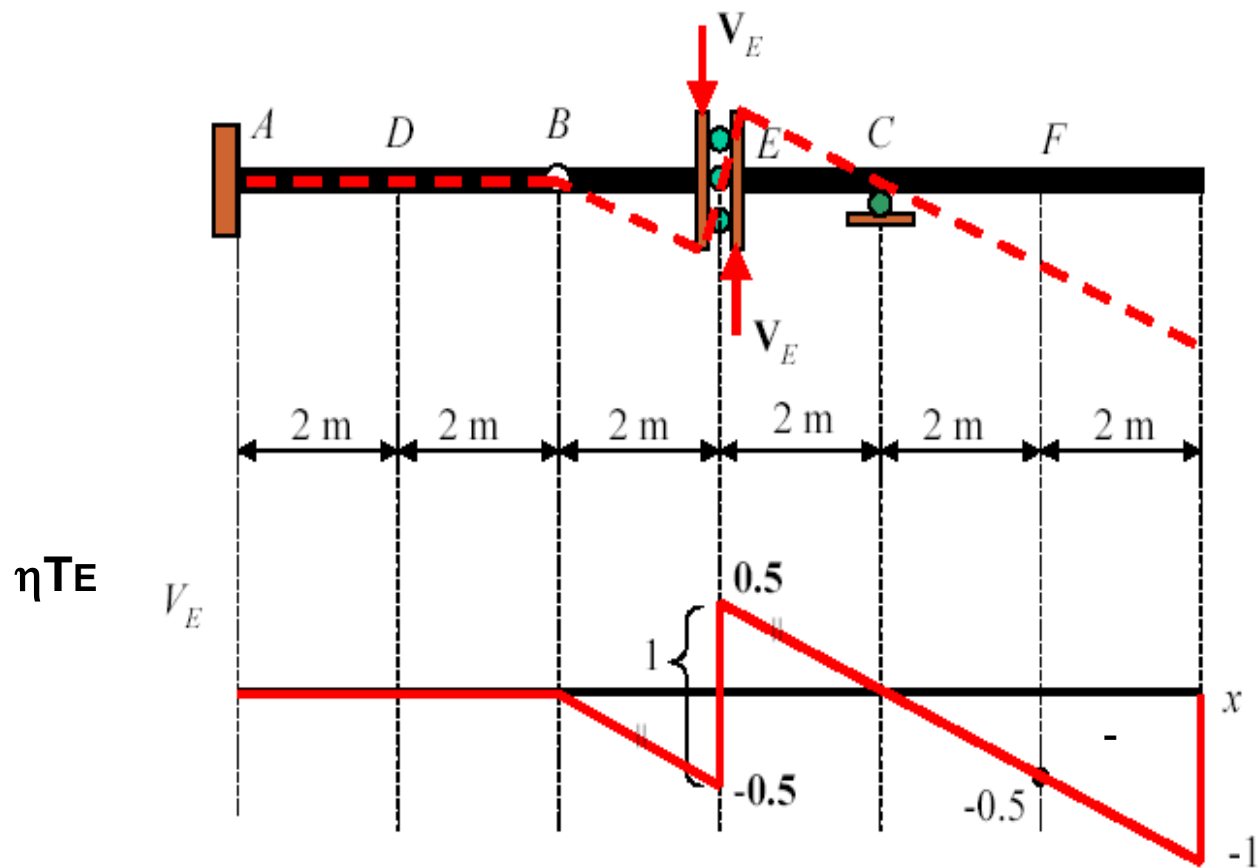
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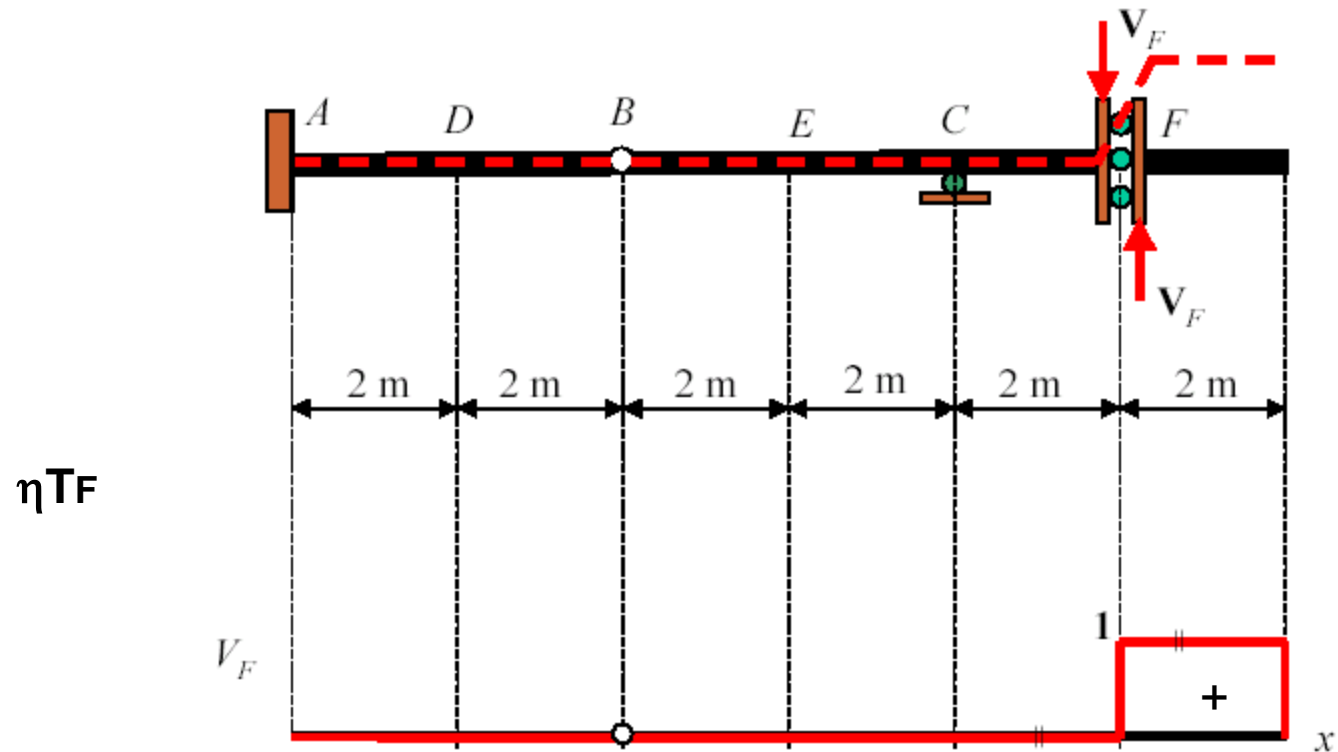
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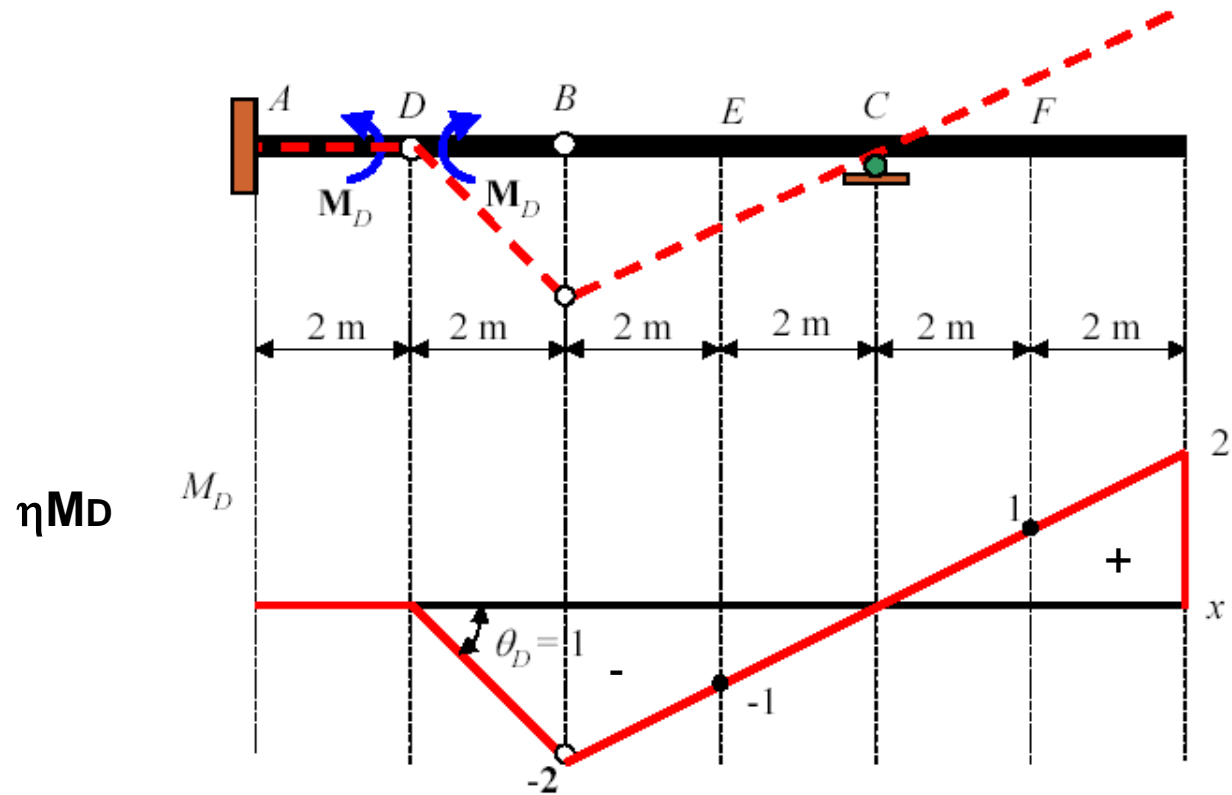
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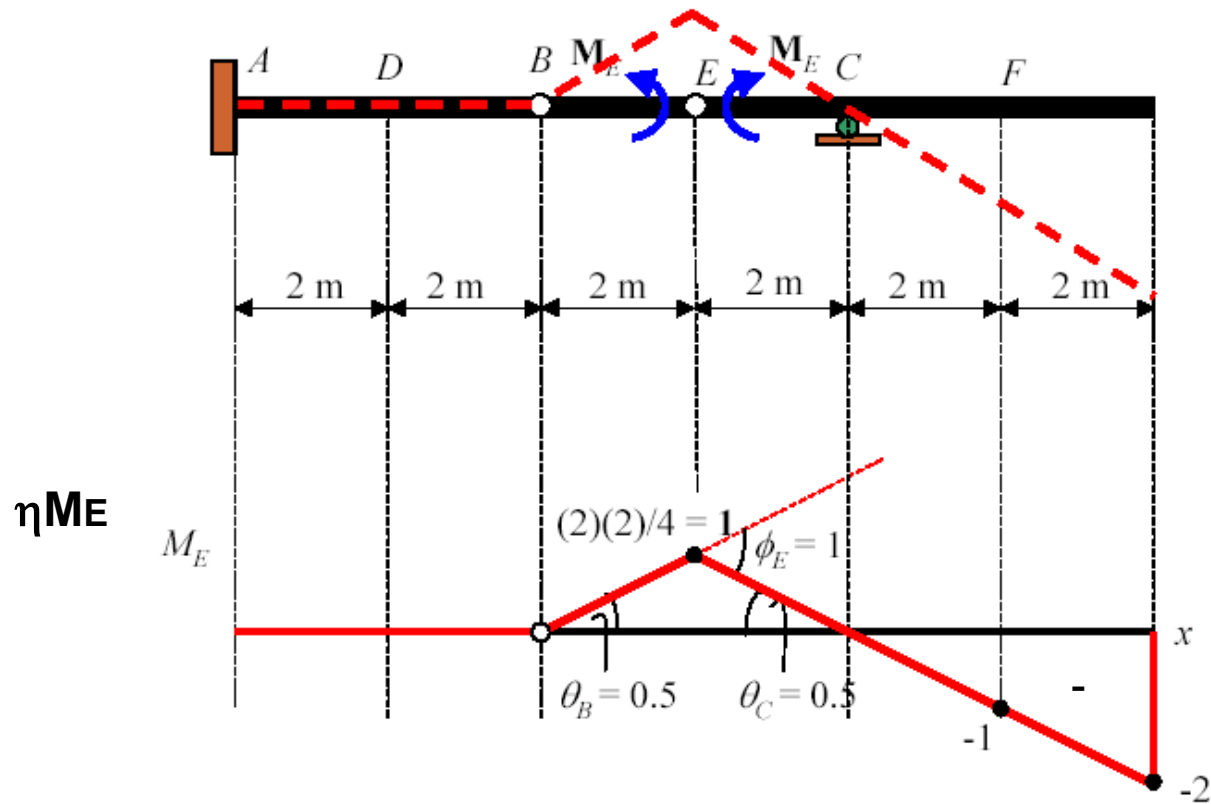
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