Given:

hinge

E

F

D

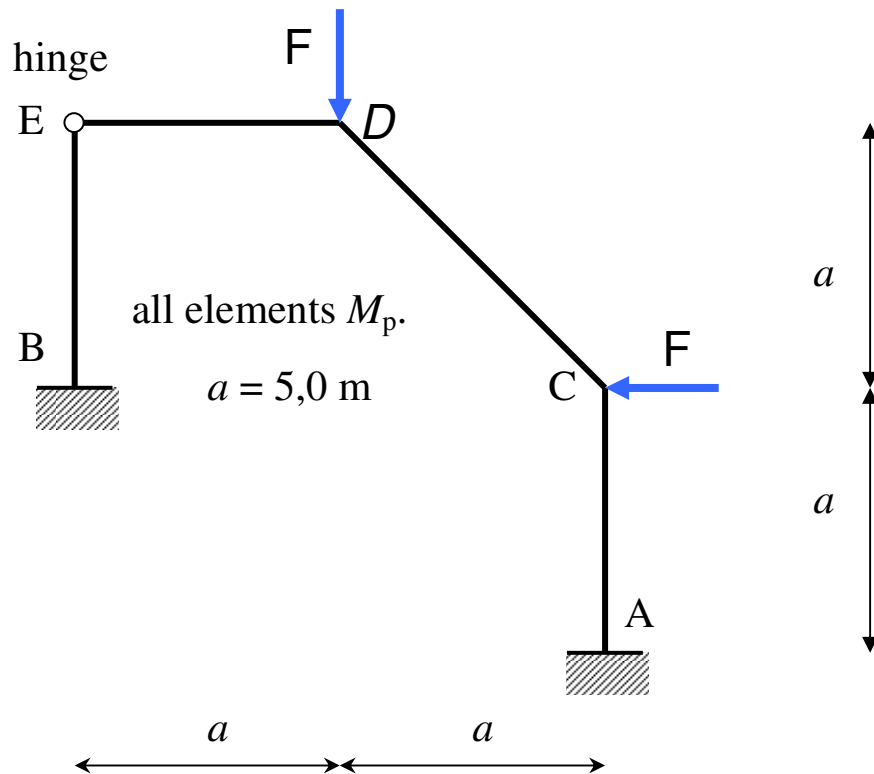all elements M_p.

B

$a = 5,0$ m

C

F

A

a

a

a

a

Questions:

a) Determine the degree of static indeterminancy and the maximum number of hinges to obtain failure mechanisms?
b) Find the ultimate load for each mechanism
c) Which mechanism is the collapse mechanism and find the collapse load F_p which belongs to it.
d) Find the moment distribution for the collapse load.
e) Check the results for Prager's uniqueness theorem
f) CHECK THE RESULT WITH THE COMPUTER PROGRAM MP ON THE WEB SITE