Typical Solution

Faculty of Engineering	**Philadelphia University**	Mechanical Eng. Dep.
Course name: Theory of machines	**First Quiz**	Course number:620333 class(1)
Instructor: Eng. Laith Batarseh	**Sunday 4/11/2018**	Allowed time: 10 minutes

Student Name: **Student ID number:**

Problem #1: find the mobility for the following mechanism

$N = 12$

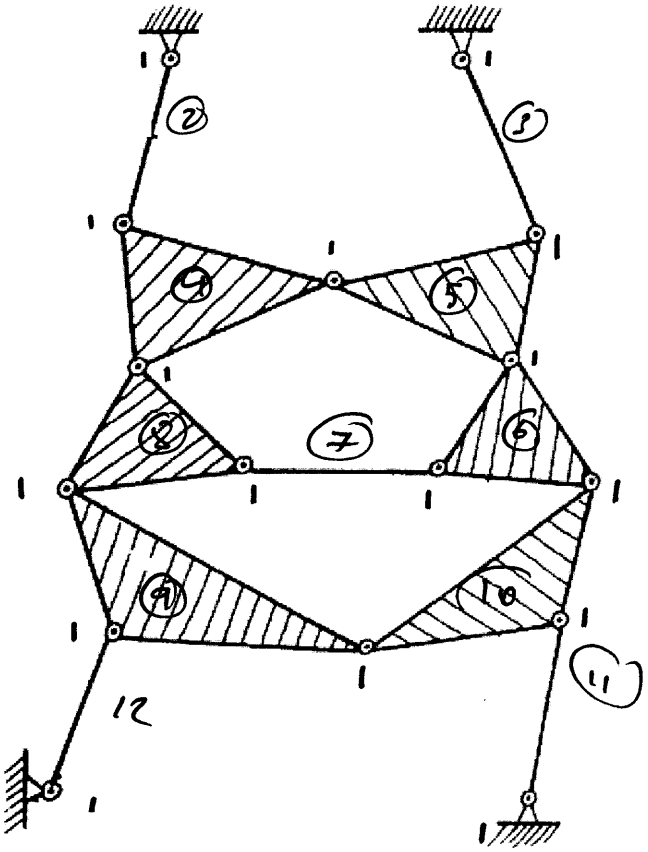
$P_1 = 16$

$P_2 = 0$

$M = 3(N-1) - 2P_1 - P_2$

$= 3(12-1) - (2)(16) - 0$

$= 33 - 32 = 1$



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Faculty of Engineering	**Philadelphia University**	Mechanical Eng. Dep.
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Student Name: **Student ID number:**

$N = 13$

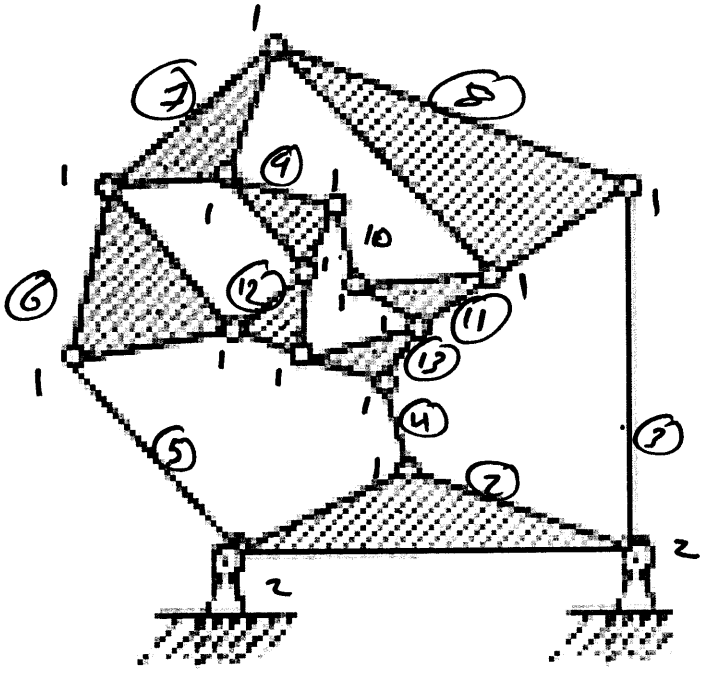
$P_1 = 18$

$P_2 = 0$

$M = 3(N-1) - 2P_1 - P_2$

$= 3(13-1) - (2)(18) - 0$

$= 36 - 36 = 0$

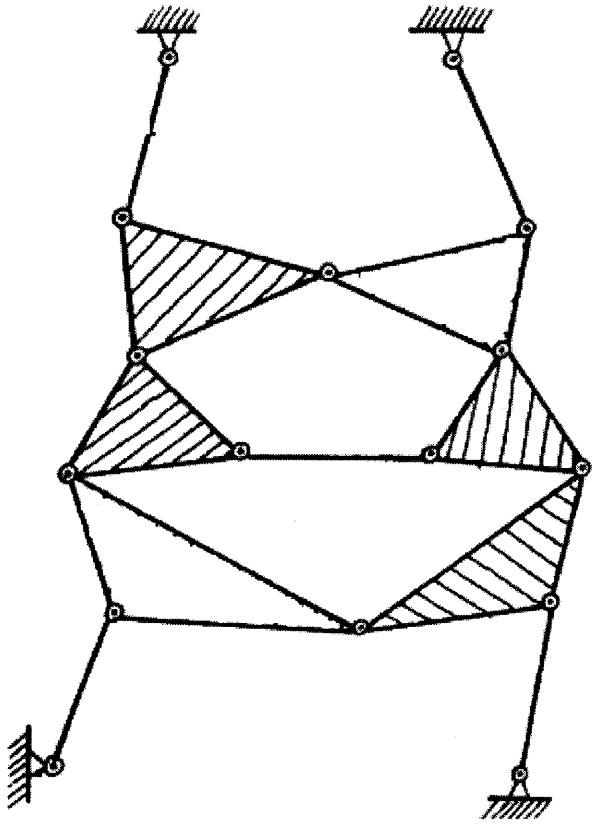


Typical.

Faculty of Engineering	**Philadelphia University**	Mechanical Eng. Dep.
Course name: Theory of machines	**First Quiz**	Course number:620333 **class(2)**
Instructor: Eng. Laith Batarseh	**Monday 5/11/2018**	Allowed time: 10 minutes

Student Name: **Student ID number:**

Problem #1: find the mobility for the following mechanism



$N = 16$

$P_1 = 22$

$P_2 = 0$

$M = 3(N-1) - 2P_1 - P_2$

$= 3(16-1) - (2)(22) - 0$

$= 45 - 44 = 1$