

Final exam on Mechanics of Structures 3, 23.06.2020
remote method

===== Solutions sheets must meet the requirements below =====

1. Must include the declaration:

I declare that this piece of work, which is the basis for recognition of achieving learning outcomes in the Mechanics of Structures 3 course, was completed on my own.

First and last name (clearly handwritten)

Student ID number (clearly handwritten)

2. Must be turned in via MS Teams

Turn-in deadline: 23.06.2020, 13:30 (60 minutes after releasing)

Problem 1.

Calculate reactions at fixed end of the grillage in Fig. 1.

Assume $EJ = GJ_s$.

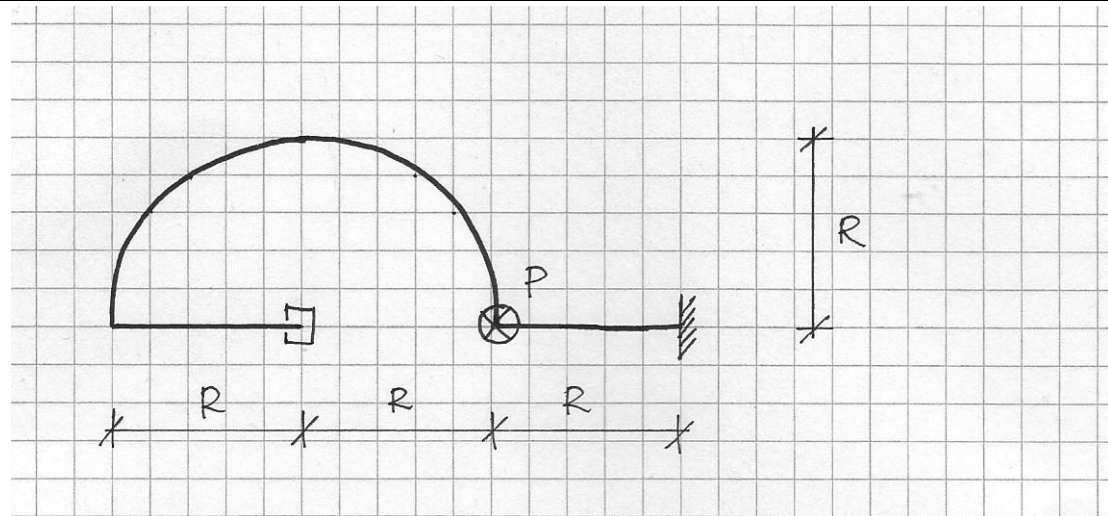


Fig. 1.

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Problem 2.

For a given rigid-joint grillage,
calculate the amplitude of deflection of a mass point.

Assume: $EJ = GJ_s$, $\phi = 0.6\omega$, $\tilde{P}(t) = P \cos(\phi t)$

