Birzeit University
Faculty of Engineering
Department of Civil and Environmental Engineering
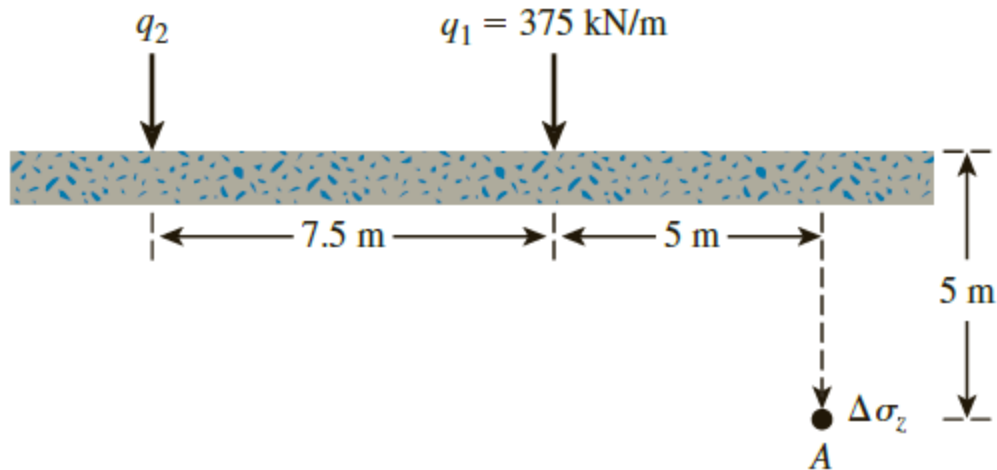
ENCE 331, Soil Mechanics

<u>Homework assignment #9</u>
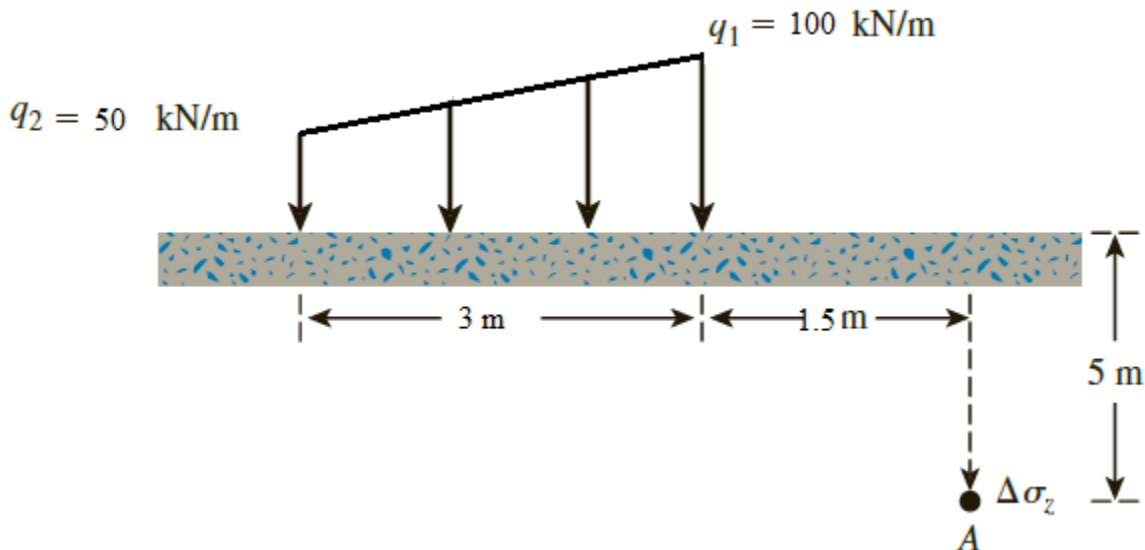Due on Tuesday Jan. 12th, 2021 @ 12:00 AM.

Problem 1:

Due to application of line loads q_1 and q_2, the vertical stress increase at point A is 58 kN/m^2.
Determine the magnitude of q_2.

Problem 2:

A strip foundation is subjected to the load shown below. Determine the increase in vertical
stress at point A

Problem 3:

A rectangular area is subjected to a uniformly distributed load of q = 450 kN/m². Determine the increase in vertical stress, at a depth of z= 3m and 6 m under points A, B, and C.