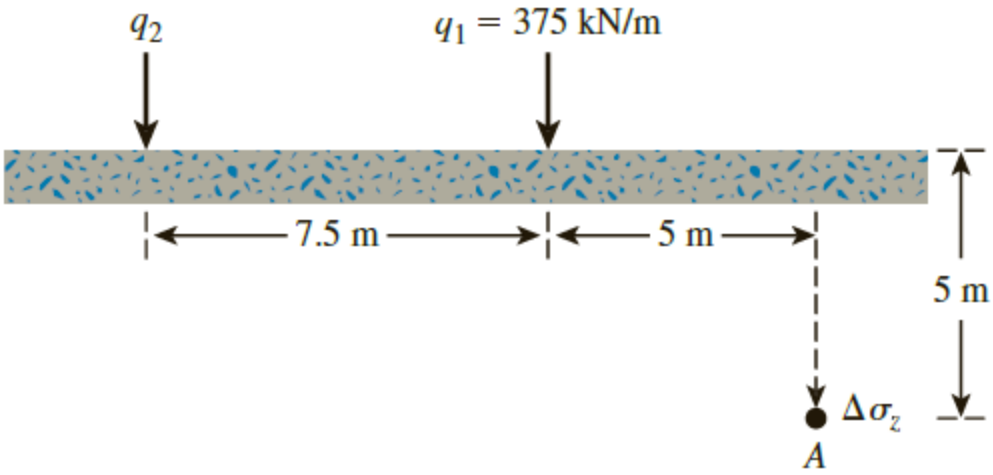
Birzeit University
Faculty of Engineering
Department of Civil and Environmental Engineering

ENCE 331, Soil Mechanics

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

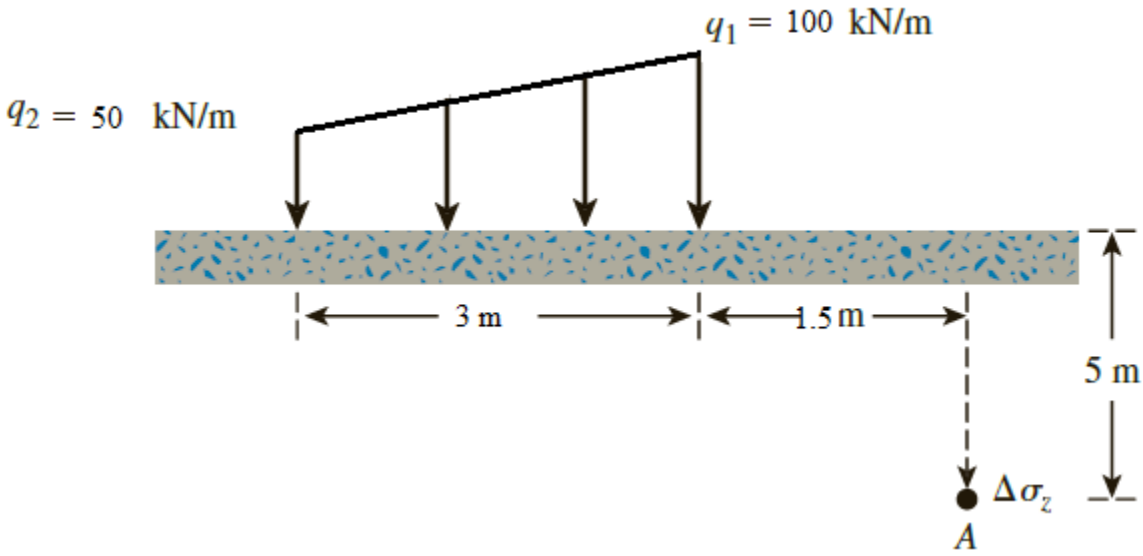
Problem 1:

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/m^2. Determine the increase in vertical stress, at a depth of z= 3m and 6 m under points A, B, and C.