OVRS 28.6.2011

1) $X \sim$ NORMALNA $\quad m_x = 2.5\ kN/m^2 \quad \sigma_x = m_x V_x = 2.5 \times 0.04$

$\sigma_x = 0.1\ kN/m^2$

$Y \sim$ GAMA $\quad m_y = 1.7\ kN/m^2 \quad \sigma_y = 0.5\ kN/m^2$

a) NEODVISNI $X, Y \quad Z = X + Y$

$m_z = m_x + m_y = \underline{4.2\ kN/m^2}$

$\sigma_z^2 = \sigma_x^2 + \sigma_y^2 = 0.1^2 + 0.5^2 = \underline{0.26}$

b) ODVISNI $X, Y$

$m_z = 4.2\ kN/m^2$

$\sigma_z^2 = \sigma_x^2 + \sigma_y^2 + 2 \varrho_{xy} \sigma_x \sigma_y = 0.1^2 + 0.5^2 + 2 \times 0.3 \times 0.1 \times 0.5$

$\underline{\sigma_z^2 = 0.29}$