

$$\begin{array}{ll}
 2) \quad m_{x_1} = 20 & \sigma_{x_1} = 5 \\
 m_{x_2} = 40 & \sigma_{x_2} = 15 \\
 m_{x_3} = 20 & \sigma_{x_3} = 10 \\
 m_{x_4} = 30 & \sigma_{x_4} = 10
 \end{array}$$


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$$X = X_1 + X_2 + X_3 + X_4$$

$$m_X = m_{x_1} + m_{x_2} + m_{x_3} + m_{x_4} = 20 + 40 + 20 + 30 = 110$$

$$\sigma_X^2 = \sigma_{x_1}^2 + \sigma_{x_2}^2 + \sigma_{x_3}^2 + \sigma_{x_4}^2 = 5^2 + 15^2 + 10^2 + 10^2 = 450$$

$$\sigma_X = \sqrt{450} \approx 21.2132$$

$$\begin{aligned}
 P(X > 120) &= 1 - P(X \leq 120) = 1 - F_X(120) = 1 - F_U\left(\frac{120 - 110}{21.21}\right) \\
 &= 1 - F_U(0.471) = 1 - 0.6813 = \underline{\underline{0.3187}}
 \end{aligned}$$

VERJETNOST, DA ŠTUDENTIU ZMANJŠA ČASA, JE 0.3187.