

Solution

Women's height $X = N(63.6, 6.25)$, so we are to find the probability $X > 70$, or $(X - 63.6) \frac{1}{2.5} > (70 - 63.6)/2.5 = 2.56$. This is equal to $1 - \Phi(2.56) = 0.01$, where Φ -distribution function of standard Gaussian random variable.

Answer. $0.01 = 1\%$