

Solution

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

Answer.  $0.01 = 1\%$