[redacted]

a) $P(x<9,9) + P(x>10,1) = \Phi(-1) + 1 - \Phi(1) =$
$= 2 - 2\Phi(1)$
$= 2 - 2\,0,8413 = 0,3174$

$z_1 = \frac{9,9-10}{0,1} = -1$

$z_2 = \frac{10,1-10}{0,1} = 1$

β) $2 - 2\Phi(z) = 0,06 \Rightarrow$ [illegible]

$\Phi(z) =$

$\Rightarrow -2\Phi(z) = -1,94$

$\Phi(z) = 0,97$

$z = 1,88$

$1,88 = \frac{10,1-10}{\sigma} \Rightarrow 1,88\sigma = 0,1 \Rightarrow \sigma = \frac{5}{18}$

$\sigma^2 = \frac{25}{324}$

ή $\sigma^2 = 0,0771$

δ) $P_{av} = 0,3174$

$\binom{5}{3} P_{av}^3 (1-P_{av})^2 = 10 \cdot 0,0319 \cdot 0,4659 = 0,1486$

[redacted]

a) $P(x<9,9) + P(x>10,1) = \Phi(-1) + 1 - \Phi(1) =$

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$1,88 = \frac{10,1-10}{\sigma} \Rightarrow 1,88\,\sigma = 0,1 \Rightarrow \sigma = \frac{5}{94} \Rightarrow$

$\Rightarrow \sigma^2 = \frac{25}{8836}$ ή $\sigma^2 = 0,002829$

γ) $P_{av} = 0,3174$

$\binom{5}{3} P_{av}^3 (1-P_{av})^2 = 10 \cdot 0,0319 \cdot 0,4659 = 0,148$