a) odavde se racuna udaljenost d i onda se izracuna povrsina i omjer povrsina koji se trazi.

$$A = 69{,}55 + 26{,}16 \log f\big|_{\text{MHz}} - 13{,}82 \log h_{\text{BS}}$$

$$B = 44{,}9 - 6{,}55 \log h_{\text{BS}}$$

$$E = 3{,}2\left(\log(11{,}75 h_{\text{MS}})\right)^2 - 4{,}97 \qquad \text{za velike gradove } f \geq 300\,\text{MHz}$$

$$L\big|_{\text{dB}} = A + B \log d\big|_{\text{km}} - E \qquad \text{- URBANO PODRUČJE}$$

$$\text{Logd}\big|_{\text{km}} = \frac{\text{L - A + E}}{\text{B}}$$

$$\text{d}\big|_{\text{km}} = 10^{\frac{\text{L - A + E}}{\text{B}}}$$

$$\text{P1} = \text{d}\big|_{\text{km}}^{2} \times \pi$$

b) i c) odavdje se prvo izracuna L za oba slucaja koja su zadana i onda se racuna pouzdanost prema formuli:

$$\Pr[x > x_0] = \int_{x_0}^{\infty} p(x)dx = \frac{1}{2} - \frac{1}{2}\text{erf}\left(\frac{x_0 - \overline{x}}{\sigma_L \sqrt{2}}\right)$$

$x_0 = 150$ dB $\qquad \overline{x} = \text{L}\big|_{\text{dB}} \qquad \sigma_L = 8$ dB