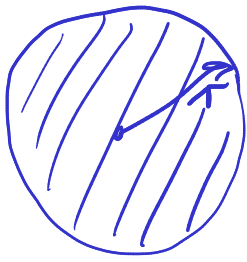


640



$$r = 3 \pm 0,01 \text{ m}$$

$$A(r) = \pi r^2$$

$$\Delta_{\max} A \leq A'(3) \cdot 0,01$$

$$(A'(r) = \pi \cdot 2r = 2\pi r)$$

$$= 2 \cdot 3 \cdot \pi \cdot 0,01 = 0,06\pi \approx \underline{\underline{0,188}} \text{ [m}^2\text{]}$$

$$\frac{\Delta_{\max} A}{A(3)} = \frac{0,06\pi}{9\pi} \approx 0,0067 = \underline{\underline{0,67 \%}}$$