



$$S = a^2, \quad dx = \frac{dl}{\sqrt{2}}$$

$$S_a = x^2, \quad S_b = (x + dx)^2$$

$$dS = S_b - S_a$$

$$dS = (x + dx)^2 - x^2 = x^2 + 2x dx + dx^2 - x^2 =$$

$$= 2x dx + dx^2 = 2x \frac{dl}{\sqrt{2}} + \left( \frac{dl}{\sqrt{2}} \right)^2 =$$

$$= \sqrt{2} x dl + \frac{dl^2}{2}$$

$$\frac{dS}{dl} = \frac{\sqrt{2} x dl + \frac{dl^2}{2}}{dl} = \sqrt{2} x + \frac{dl}{2} \sim \sqrt{2} x$$

Ответ:  $\sqrt{2} x dl + \frac{dl^2}{2}$

