

Kada resim sistem dobijam da su presence tacke $y=4\sqrt{3}$ i $y=-4\sqrt{3}$.

$$\text{Izvod od } y^2=6x \Rightarrow x=\frac{y^2}{6} \text{ je } \frac{y}{3}$$

Kada to ubacim u formulu dobijem

$$L = \int_{-4\sqrt{3}}^{4\sqrt{3}} \sqrt{1 + \left(\frac{y}{3}\right)^2} dy = \int_{-4\sqrt{3}}^{4\sqrt{3}} \sqrt{1 + \frac{y^2}{9}} dy = \int_{-4\sqrt{3}}^{4\sqrt{3}} \sqrt{\frac{9 + y^2}{9}} dy = \frac{1}{3} \int_{-4\sqrt{3}}^{4\sqrt{3}} \sqrt{9 + y^2} dy$$