V nasledujúcich úlohách určte dĺžku kriviek:

$y = \frac{1}{3}(x^2+2)^{\frac{3}{2}},\ x \in \langle 0, 3\rangle$	12
$y = \frac{x^2}{4}, x \in \langle 0, 2\sqrt{2}\rangle$	$\ln(\sqrt{3}+\sqrt{2})+\sqrt{6}$
$y = \ln\sin x,\ x \in \langle \frac{\pi}{3}, \frac{\pi}{2}\rangle$	$\ln\sqrt{3}$
$y = \frac{2}{3}x\sqrt{x},\ x \in \langle 0, 1\rangle$	$\frac{2}{3}(2\sqrt{2}-1)$
$y = \frac{x^2}{4} - \frac{1}{2}\ln x, x \in \langle 1, 2\rangle$	$\frac{3}{4}+\ln\sqrt{2}$
$y = \ln\frac{e^x+1}{e^x-1},\ y \in \langle \ln 2, \ln 5\rangle$	$\ln\frac{16}{5}$
$y = \ln\frac{e^x+1}{e^x-1},\ y \in \langle a, b\rangle$	$(a-b)+\ln\frac{e^{2b}-1}{e^{2a}-1}$
$y = \cosh x,\ x \in \langle 0, 1\rangle$	$\sinh 1 = \frac{1}{2}(e-\frac{1}{e})$
$y = \ln x,\ x \in \langle \sqrt{3}, \sqrt{8}\rangle$	$1+\frac{1}{2}\ln\frac{3}{2}$
$y = \arcsin x + \sqrt{1-x^2},\ x \in \langle 0, 1\rangle$	$2(2-\sqrt{2})$
$y = 2\sqrt{x},\ x \in \langle 1, 2\rangle$	$\ln(\sqrt{2}-1)+\ln(\sqrt{\frac{3}{2}}-1)+\frac{1}{2}\ln 2-\sqrt{2}+\sqrt{6}$
$x^{\frac{2}{3}} + y^{\frac{2}{3}} = a^{\frac{2}{3}},\ a > 0$	$6a$
$y^2 = 4x^3,\ y > 0,\ x \in \langle 0, 2\rangle$	$\frac{2}{27}(19\sqrt{19}-1)$
$y = 2x - x^2,\ x \in \langle 0, 1\rangle$	$\frac{\sqrt{5}}{2}+\frac{1}{4}\ln(\sqrt{5}+2)$
$y = \frac{2+x^6}{8x^2},\ x \in \langle 1, 2\rangle$	$\frac{33}{16}$