1. $\int \frac{\cos x}{2+\sin x}\,dx = \int \frac{1}{2+y}\,dy \overset{c}{=} \ln|2+y| = \ln(2+\sin x)$ na $\mathbb{R}$

1. věta o substituci:
$y = \sin x$
$dy = \cos x\,dx$

2. $\int \sqrt{1-x^2}\,dx = \int \sqrt{1-\sin^2 t}\,\cos t\,dt = \int \sqrt{\cos^2 t}\,\cos t\,dt$

Hledáme prim. fci na $(-1,1)$.
2. věta o substituci:
$x = \sin t$, $t \in (-\frac{\pi}{2}, \frac{\pi}{2})$ ... $t = \arcsin x$, $x \in (-1,1)$
$dx = \cos t\,dt$
$\varphi(t) = \sin t$ prostá na $(-\frac{\pi}{2}, \frac{\pi}{2})$, $\varphi((-\frac{\pi}{2}, \frac{\pi}{2})) = (-1,1)$

$= \int \cos^2 t\,dt = \int \frac{1}{2}(1+\cos 2t)\,dt \overset{c}{=} \frac{1}{2}t + \frac{1}{4}\sin 2t =$

$\cos t > 0$ pro $t \in (-\frac{\pi}{2}, \frac{\pi}{2})$

$= \frac{1}{2}\arcsin x + \frac{1}{4}\sin(2\arcsin x)$ na $(-1,1)$