b) $4\sin x\cos x - 1 = 0$

$\Leftrightarrow 2\cdot \underbrace{2\sin x\cos x}_{\sin 2x} - 1 = 0$

$\Leftrightarrow 2\sin 2x - 1 = 0 \quad \Leftrightarrow \sin 2x = \frac{1}{2} = \sin\frac{\pi}{6}$

$\Leftrightarrow 2x = \frac{\pi}{6} + m2\pi \;|:2$ tai $2x = \underbrace{\pi - \frac{\pi}{6}}_{\frac{5\pi}{6}} + m2\pi \;|:2$

$\Leftrightarrow x = \frac{\pi}{12} + m\pi$ tai $x = \frac{5\pi}{12} + m\pi$, $m \in \mathbb{Z}$

6.21 a) $2\sin x\cos x = \sin x$

$\Leftrightarrow \sin 2x = \sin x$

$\Leftrightarrow 2x = x + m2\pi$ tai $2x = \pi - x + m2\pi$

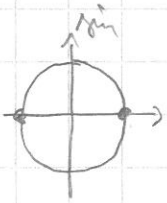
$\Leftrightarrow x = m2\pi$ tai $3x = \pi + m2\pi \;|:3$

$\Leftrightarrow x = \frac{\pi}{3} + m\frac{2\pi}{3}$ $m \in \mathbb{Z}$

TAI: $2\sin x\cos x = \sin x$

$\Leftrightarrow 2\sin x\cos x - \sin x = 0$

$\Leftrightarrow \sin x(2\cos x - 1) = 0$



$\Leftrightarrow \sin x = 0$ tai $2\cos x - 1 = 0$

$\Leftrightarrow x = m\pi$ tai $\Leftrightarrow \cos x = \frac{1}{2} = \cos\frac{\pi}{3}$

$\Leftrightarrow x = \pm\frac{\pi}{3} + m2\pi$, $m \in \mathbb{Z}$

TAI: $2\sin x\cos x = \sin x \;|:\sin x \neq 0$, eritoistapaus $\sin x = 0$

$\Leftrightarrow 2\cos x = 1$ $\Rightarrow 0 = 0$ ✓

$\vdots$

$x = \pm\frac{\pi}{3} + m2\pi$ tai $x = m\pi$

b) $2\sin x\cos x = \cos x \;|:\cos x \neq 0$ eritoistapaus $\cos x = 0$

$\Rightarrow 0 = 0$ ✓

$2\sin x = 1$

$\vdots$