

2,44
6

$$3\sin^2 x - 4\sin x \cos x + 5\cos^2 x = 2$$

$$3\sin^2 x - 4\sin x \cos x + 5\cos^2 x = 2\sin^2 x + 2\cos^2 x$$

$$\sin^2 x - 4\sin x \cos x + 3\cos^2 x = 0 \quad /: \cos^2 x \neq 0$$

$$\tan^2 x - 4\tan x + 3 = 0$$

$$\tan x = 3 \rightarrow x = \arctan(3) + \pi k$$

$$\tan x = 1 \rightarrow x = \frac{\pi}{4} + \pi k$$

$$x = \arctan(3) + \pi k$$