

c) $x^2 = i$



$$r^2 (\cos 2\varphi + i \sin 2\varphi) = \cos \frac{\pi}{2} + i \sin \frac{\pi}{2}$$

$$2\varphi = \frac{\pi}{2} + 2\pi n$$

$$r^2 = 1$$

$$r = \pm 1$$

$$\varphi = \frac{\pi}{4} + \pi n$$

c) $x = \pm \frac{1}{\sqrt{2}}(1 + i)$

Ledtråd:

Skriv om båda leden
i polär form.

$$\pm 1 \left(\cos \frac{\pi}{4} + i \sin \frac{\pi}{4} \right) = \pm 1 \left(\frac{1}{\sqrt{2}} + i \frac{1}{\sqrt{2}} \right)$$

$$x = \pm \frac{1}{\sqrt{2}} (1 + i)$$