

síťlani a odčítanie k.č. n-goniom. tvaru  
mech

$$z_1 = 1 \left( \cos \frac{\pi}{2} + i \sin \frac{\pi}{2} \right)$$

$$z_2 = \sqrt{2} \left( \cos \frac{7\pi}{4} + i \sin \frac{7\pi}{4} \right)$$

$$z_1 \cdot z_2 = 1 \cdot \sqrt{2} \left( \cos \left( \frac{\pi}{2} + \frac{7\pi}{4} \right) + i \sin \left( \frac{\pi}{2} + \frac{7\pi}{4} \right) \right) =$$

$$= \sqrt{2} \left( \cos \left( \frac{9\pi}{4} \right) + i \sin \left( \frac{9\pi}{4} \right) \right) =$$

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

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

$$\frac{z_1}{z_2} = \frac{1}{\sqrt{2}} \left( \cos \left( \frac{\pi}{2} - \frac{7\pi}{4} \right) + i \sin \left( \frac{\pi}{2} - \frac{7\pi}{4} \right) \right) =$$

$$= \frac{1}{\sqrt{2}} \left( \dots \text{upraviť} \right)$$

přičasť:  $(1+i)^6 = (1+i)(1+i)(1+i)\dots(1+i)$   
1. možnosť 6x a podľa

2. možnosť

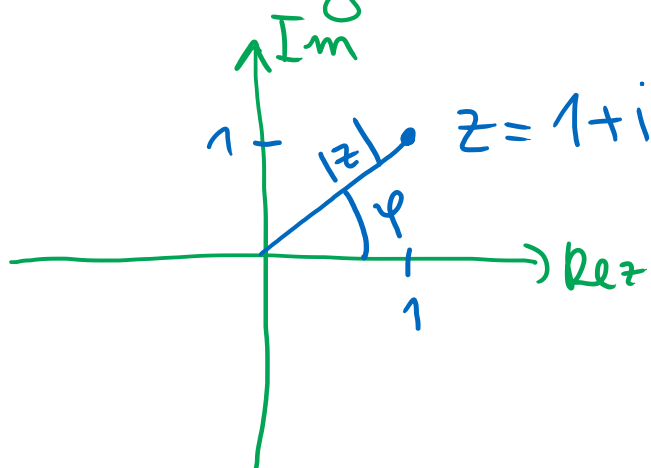
**MOIREOVA VETA**

$$z = |z| (\cos \varphi + i \sin \varphi)$$

$$z^m = |z|^m (\cos m\varphi + i \sin m\varphi)$$

$m \in \mathbb{N}$

[1.1]  $1+i = \sqrt{2} \left( \cos \frac{\pi}{4} + i \sin \frac{\pi}{4} \right)$   
pobudymy in  
goniom. tvar.



$$|z| = \sqrt{2}$$

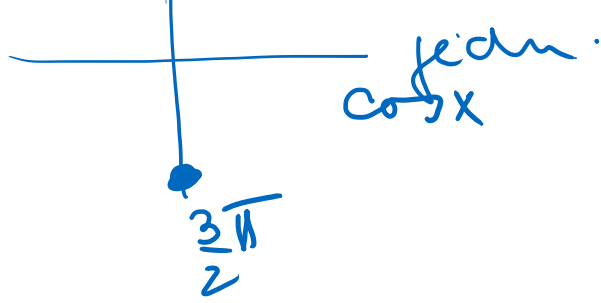
$$\varphi = \frac{\pi}{4}$$

$$(1+i)^6 = (\sqrt{2})^6 \left( \cos 6 \cdot \frac{\pi}{4} + i \sin 6 \cdot \frac{\pi}{4} \right) =$$

Moireova  
veta

$$n=6$$

$$= 8 \left( \cos \frac{3\pi}{2} + i \sin \frac{3\pi}{2} \right) = -1 - i$$



**EXPONENCIÁLNY TVAR k.č.**

(Eulerov vzťah:  $e^{i\varphi} = \cos \varphi + i \sin \varphi$ )

$$z = |z| (\cos \varphi + i \sin \varphi) = |z| \cdot e^{i\varphi}$$

13. týždeň:  $\varphi: 30$  ANO

Revidovaný z M

2. ZP

3.1.

Prípad na stránke KMTI

↓ pre KM (Inf)

12.1.

info  
prezencij mailom.