

INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

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Převeď např. čísla z goniometrického tvaru na tvar algebraický:

$$A = 7 \cdot \sqrt{2} \cdot \left(\cos \frac{5}{4} \pi + i \sin \frac{5}{4} \pi \right) = 7 \cdot \sqrt{2} \cdot \left(-\frac{\sqrt{2}}{2} - i \frac{\sqrt{2}}{2} \right) = -\frac{7 \cdot \sqrt{2} \cdot \sqrt{2}}{2} - \frac{7 \cdot \sqrt{2} \cdot \sqrt{2}}{2} i = -7 - 7i$$

↓

A - c

$$B = \sqrt{2} \cdot \left(\cos \frac{3}{4} \pi + i \sin \frac{3}{4} \pi \right) = \sqrt{2} \cdot \left(-\frac{\sqrt{2}}{2} + i \frac{\sqrt{2}}{2} \right) = \frac{-\sqrt{2} \cdot \sqrt{2}}{2} + i \frac{\sqrt{2} \cdot \sqrt{2}}{2} = -1 + i$$

↓

B - e

$$C = 4 \cdot \left(\cos \frac{2}{3} \pi + i \sin \frac{2}{3} \pi \right) = 4 \cdot \left(-\frac{1}{2} + i \frac{\sqrt{3}}{2} \right) = -2 + 2i\sqrt{3}$$

↓

C - a

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

D - f

$$E = 2 \cdot \left(\cos \frac{5}{6} \pi + i \sin \frac{5}{6} \pi \right) = 2 \cdot \left(-\frac{\sqrt{3}}{2} + i \frac{1}{2} \right) = -\sqrt{3} + i$$

↓

E - b

$$F = 10 \cdot \sqrt{2} \cdot \left(\cos \frac{7}{4} \pi + i \sin \frac{7}{4} \pi \right) = 10 \cdot \sqrt{2} \cdot \frac{\sqrt{2}}{2} - i 10 \cdot \sqrt{2} \cdot \frac{\sqrt{2}}{2} = 10 - 10i$$

↓

F - d