

A grupa

1) Nacrtati graf funkcije  $f(x) = \frac{1}{2} \cos(3x)$ .



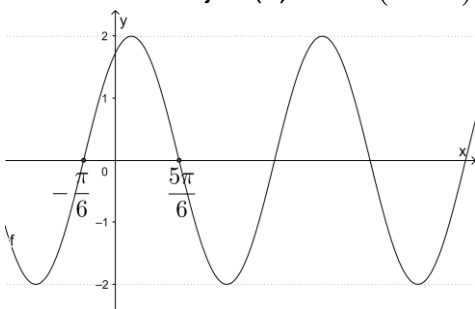
bodova: \_\_\_\_\_/5MK

2) Nacrtati graf funkcije  $f(x) = -\operatorname{tg}\left(x + \frac{3\pi}{4}\right)$ .



bodova: \_\_\_\_\_/4MK

3) Odrediti funkciju  $f(x) = a \sin(bx + c)$  čiji je graf prikazan na slici.



bodova: \_\_\_\_\_/3MK

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4) Odrediti sva rješenja jednadžbe  $2 \sin\left(x - \frac{\pi}{4}\right) + 1 = 0$ , koja pripadaju intervalu  $\langle 0, 4\pi \rangle$ .

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bodova: \_\_\_\_/3RP

5) Riješiti jednadžbu  $3 \sin^2 x + \sin x \cdot \cos x - 4 \cos^2 x = 0$ .

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bodova: \_\_\_\_/3RP

6) Riješiti nejednadžbu  $\cos x \geq \frac{\sqrt{2}}{2}$ .

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bodova: \_\_\_\_/3RP

**B grupa**

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1) Nacrtati graf funkcije  $f(x) = -2\sin\left(x - \frac{\pi}{4}\right)$ .



bodova: \_\_\_\_\_/5MK

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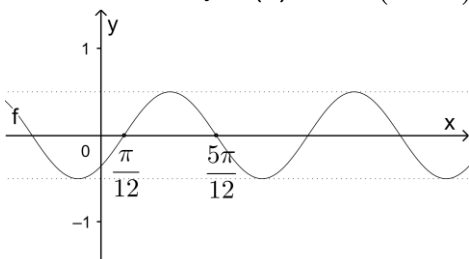
2) Nacrtati graf funkcije  $f(x) = \operatorname{ctg}\left(\frac{3x}{4}\right)$ .



bodova: \_\_\_\_\_/4MK

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3) Odrediti funkciju  $f(x) = a\sin(bx + c)$  čiji je graf prikazan na slici.



bodova: \_\_\_\_\_/3MK

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4) Odrediti sva rješenja jednadžbe  $2 \cos\left(\frac{3}{2}x\right) + \sqrt{2} = 0$ , koja pripadaju intervalu  $\langle 0, 2\pi \rangle$

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bodova: \_\_\_\_\_/3RP

5) Riješiti jednadžbu  $2 \sin^2 x + 3 \sin x \cdot \cos x + \cos^2 x = 0$ .

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bodova: \_\_\_\_\_/3RP

6) Riješiti nejednadžbu  $\sin x < \frac{\sqrt{3}}{2}$ .

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bodova: \_\_\_\_\_/3RP