

2022新疆高一下学期高中数学期末考试

1.

已知集合 $A = \{x | -2 \leq x \leq 3\}$, $B = \{x | x^2 - 3x \leq 0\}$, 则 $A \cup B = ()$

- A. $[-2, 3]$ B. $[-2, 0]$ C. $[0, 3]$ D. $[-3, 3]$

2.

函数 $f(x) = \begin{cases} x^2 + 2x, & x \leq 0, \\ \ln x, & x > 0, \end{cases}$, 则 $f\left(f\left(\frac{1}{e}\right)\right) = ()$

- A. -1 B. 1 C. e D. $\frac{1}{e}$

3.

将函数 $f(x) = \sin 2x$ 的图象向右平移 $\frac{\pi}{6}$ 个单位长度得到 $g(x)$ 图象, 则函数的解析式是 ()

- A. $g(x) = \sin\left(2x + \frac{\pi}{3}\right)$ B. $g(x) = \sin\left(2x + \frac{\pi}{6}\right)$
C. $g(x) = \sin\left(2x - \frac{\pi}{3}\right)$ D. $g(x) = \sin\left(2x - \frac{\pi}{6}\right)$

4.

已知向量 $\vec{a}, \vec{b}$ 满足 $|\vec{a}| = 1$, $\vec{a} \cdot \vec{b} = -1$, 则 $\vec{a} \cdot (2\vec{a} - \vec{b}) = ()$

- A. 4 B. 3 C. 2 D. 0

5.

若 α, β 均为第二象限角, 满足 $\sin \alpha = \frac{3}{5}$, $\cos \beta = -\frac{5}{13}$, 则 $\cos(\alpha + \beta) = ()$

- A. $-\frac{33}{65}$ B. $-\frac{16}{65}$ C. $\frac{63}{65}$ D. $\frac{33}{65}$

6.

$\triangle ABC$ 中, $a = 2, b = \sqrt{6}, B = \frac{\pi}{3}$, 则 $\sin A$ 的值是 ()

- A. $\frac{1}{2}$ B. $\frac{\sqrt{2}}{2}$ C. $\frac{\sqrt{3}}{2}$ D. $\frac{1}{2}$ 或 $\frac{\sqrt{3}}{2}$