

2022四川高一下学期人教A版(2022)高中数学开学考试

1. _____

已知集合 $A = \{-1, 1, 2\}$, $B = \{x | x + 1 \geq 0\}$, 则 $A \cap B = ()$.

- A. $\{-1, 1, 2\}$ B. $\{1, 2\}$ C. $\{-1, 2\}$ D. $\{2\}$

2. _____

函数 $y = \sqrt{x(3-x)} + \frac{1}{\sqrt{x-1}}$ 的定义域为()

- A. $[0, 3]$ B. $[1, 3]$ C. $[3, +\infty]$ D. $(1, 3]$

3. _____

已知 $\tan \alpha = -\frac{3}{4}$, 则 $\tan(\alpha + \frac{\pi}{4})$ 的值是()

- A. $\frac{1}{7}$ B. $-\frac{1}{7}$ C. -7 D. 7

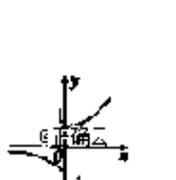
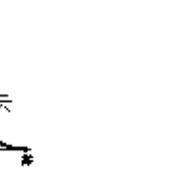
4. _____

已知函数 $f(x) = \begin{cases} 2^x - 1, & x \leq 1 \\ \log_2(x-1), & x > 1 \end{cases}$, 则 $f[f(\frac{5}{2})] = ()$

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

5. _____

函数 $f(x) = \frac{e}{|x|} \cdot 2^{|x|}$ 的图像大致形状是

- A.  B.  C.  D. 

6. _____

已知 $\cos(\frac{5\pi}{12} + \alpha) = \frac{1}{3}$, 且 $-\pi < \alpha < -\frac{\pi}{2}$, 则 $\cos(\frac{\pi}{12} - \alpha) = ()$

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