1. 함수 $f(x) = 2x - 5$ 의 역함수를 $y = f^{-1}(x)$ 라 할 때, $f^{-1}(-3)$ 의 값은 얼마인가?

① -3 ② -1 ③ 0 ④ 1 ⑤ 3

2. $f(x) = ax + b$ $(a \neq 0)$, $g(x) = x + c$라 할 때, $(f \circ g)(x) = 2x - 3$, $f^{-1}(3) = -2$가 성립한다. 상수 a, b, c의 값을 차례대로 구하여라.

답: $a =$ _____

답: $b =$ _____

답: $c =$ _____

3. $f(x)=\begin{cases}4x^2+1 & (x\geq 0)\\ 2x+1 & (x<0)\end{cases}$, $g(x)=3x-7$ 일때, $(g^{-1}\circ f)^{-1}(3)$ 의 값은 얼마인가?

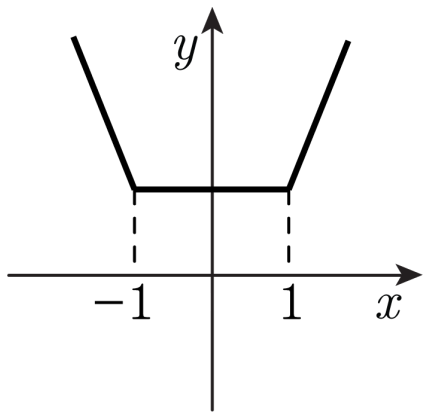
① $\frac{1}{3}$ ② $\frac{1}{2}$ ③ $\frac{2}{3}$ ④ 1 ⑤ 2

4. 함수 $f(x) = |4x - a| + b$ 는 $x = 3$ 일 때 최솟값 -2를 가진다. 이 때, 상수 a, b 의 합 $a + b$ 의 값을 구하여라.

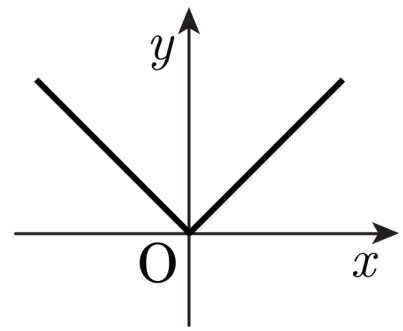
답: _____

5. 다음 중 함수 $y = |x-1| + x + |x+1|$의 그래프는?

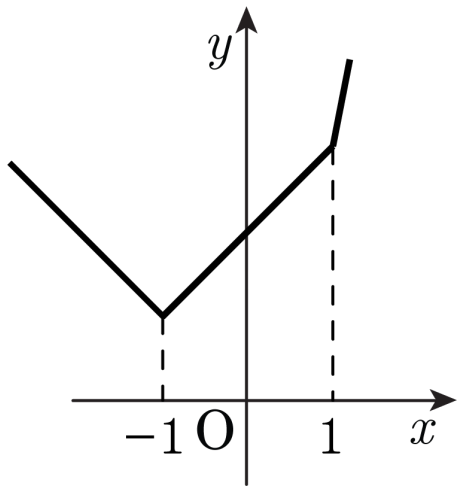
①



②



③



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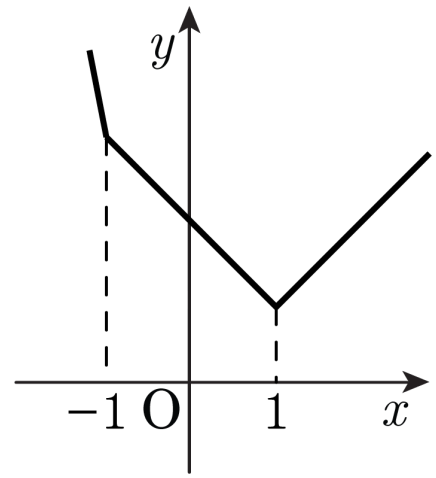
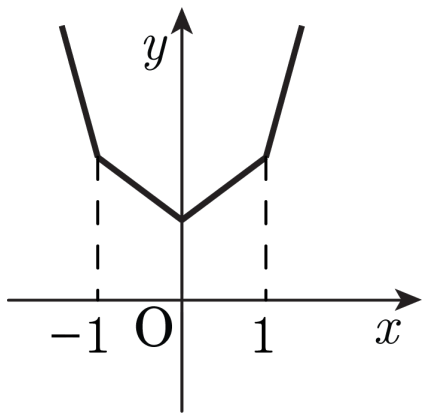
⑤