

1. 어떤 수 x 의 8배에 2를 더한 수의 4분의 1은?

① $2x + \frac{1}{2}$

② $x + \frac{1}{2}$

③ $2x + 2$

④ $2x + 4$

⑤ $2x + 16$

해설

$$\frac{8x + 2}{4} = 2x + \frac{1}{2}$$

2. $y = \frac{3x-1}{x-1}$ 의 점근선의 방정식은 $x = 1, y = a$ 이다. a 의 값은?

① 2

② 3

③ 4

④ -1

⑤ -2

해설

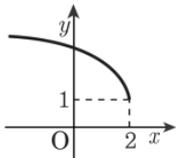
$$y = \frac{3(x-1) + 2}{x-1} = \frac{2}{x-1} + 3$$

따라서 점근선의 방정식이 $x = 1, y = 3$ 이므로

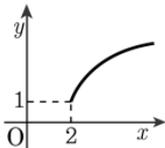
$$a = 3$$

3. 함수 $y = 2\sqrt{-3x+6} + 1$ 의 그래프는?

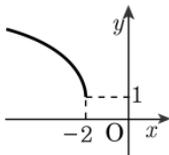
①



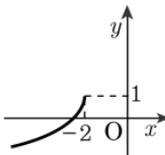
②



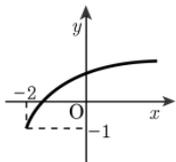
③



④



⑤



해설

$$y = 2\sqrt{-3(x-2)} + 1$$

⇒ 꼭짓점 : (2, 1)

정의역 : $x \leq 2$, 치역 : $y \geq 1$