

E1 数学 解答例

1

(1) 0

(2) $x = 2$

(3) $(b, x) = (1, 1), \left(\frac{31}{27}, \frac{1}{3}\right)$

2

(1) $\theta = \frac{\pi}{6}, \frac{5\pi}{6}$

(2) $(2x - 3y - 1)(x + 2y - 3)$

3

(1) $\overline{AB} = (1, 1, 2)$

(2) $C(k - 2, k + 1, 2k + 2)$

(3) $\frac{\sqrt{30}}{2}$

4

(1) $f'(x) = 3x^2 + 6x - 9 = 3(x + 3)(x - 1)$

(2) $x = 1, -3$

(3) $x = -3$ のとき極大値 $y = 0$, $x = 1$ のとき極小値 $y = -32$