

2119116s 佐野 海徳

1

$$(1)\sigma = (1, 4)(2, 3, 5)(6, 7)$$

$$(2)\sigma = (1, 4)(2, 5)(2, 3)(6, 7)$$

$$(3)\sigma \text{ は 4 個の互換で表されるので } \operatorname{sgn}(\sigma) = (-1)^4 = 1。$$

2

$$(1)2 * (-1) - 1 * 1 = 1$$

$$(2)3 * 1 * 1 + 1 * (-1) * 1 + 0 * 2 * (-1) - 0 * 1 * 1 - 1 * 2 * 1 - 3 * (-1) * (-1) =$$

$$3 - 1 + 0 - 0 - 2 - 3 = -3$$