

## 基礎数学（毎日）第2回小テスト解答

1

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

$$(2) (x^2 + 2x - 1)(x^2 + 2x + 1) = x^4 + 4x^3 + 4x^2 - 1$$

2

$$(1) x^2 - 5x + 4 = (x - 1)(x - 4)$$

$$(2) x^2 - 1 = (x + 1)(x - 1)$$

$$(3) (x - a)^2 - (a - b)^2 = (x - b)(x - 2a + b)$$

3

$$(1) \text{商は } x^2 + 2x + 5, \text{ 余りは } 2x + 3$$

$$(2) \text{商は } x^2 + 2, \text{ 余りは } 0$$

4

$$(1) f(x) = g(x) \times q(x) + r(x)$$

$$(2) f(x) = x^3 - 4x^2 + 7x - 1$$

5

$$f(-2) = -30$$