

1 次の_に当てはまる数を求めよ。

(1) $x^2 + 8x + \underline{\hspace{1cm}} = (x + \underline{\hspace{1cm}})^2$

(2) $x^2 - 10x + \underline{\hspace{1cm}} = (x - \underline{\hspace{1cm}})^2$

2 次の方程式を解け。

(1) $x^2 + 2x = 7$

(2) $x^2 - 6x = 1$

(3) $x^2 + 8x + 3 = 0$

(4) $x^2 - 10x - 3 = 0$

(5) $x^2 + 4x - 21 = 0$

(6) $x^2 + 3x - 2 = 0$

(7) $x^2 + 5x + 1 = 0$

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



【解答】

1

$$(1) x^2 + 8x + 16 = (x + 4)^2$$

$$(2) x^2 - 10x + 25 = (x - 5)^2$$

2

$$(1) x = -1 \pm 2\sqrt{2}$$

$$(2) x = 3 \pm \sqrt{10}$$

$$(3) x = -4 \pm \sqrt{13}$$

$$(4) x = 5 \pm 2\sqrt{7}$$

$$(5) x = 3, -7$$

$$(6) x = -\frac{3}{2} \pm \frac{\sqrt{17}}{2}$$

$$(7) x = -\frac{5}{2} \pm \frac{\sqrt{21}}{2}$$

$$(8) x = \frac{1}{2} \pm \frac{\sqrt{41}}{2}$$