

1 解答 (1) -4 (2) $-\frac{19}{12}$ (3) $4b$ (4) $\frac{4x+21y}{15}$ (5) $9+6\sqrt{7}$

(6) $(x-2)(x+9)$ (7) $x = \frac{3 \pm \sqrt{5}}{2}$

$$(1) \quad -9 - (-5) = -9 + 5 \\ = -4$$

$$(2) \quad -\frac{5}{6} - \frac{3}{4} = -\frac{10}{12} - \frac{9}{12} \\ = -\frac{19}{12}$$

$$(3) \quad 8ab^2 \times 3a \div 6a^2b = \frac{8ab^2 \times 3a}{6a^2b} \\ = 4b$$

$$(4) \quad \frac{3x+2y}{5} - \frac{x-3y}{3} = \frac{3(3x+2y) - 5(x-3y)}{15} \\ = \frac{9x+6y-5x+15y}{15} \\ = \frac{4x+21y}{15}$$

$$(5) \quad (2+\sqrt{7})(2-\sqrt{7}) + 6(\sqrt{7}+2) = 2^2 - (\sqrt{7})^2 + 6\sqrt{7} + 12 \\ = 4 - 7 + 6\sqrt{7} + 12 \\ = 9 + 6\sqrt{7}$$

$$(6) \quad (x+6)^2 - 5(x+6) - 24 \\ M = x+6 \text{ とおく。} \\ M^2 - 5M - 24 = (M-8)(M+3) \\ = (x+6-8)(x+6+3) \\ = (x-2)(x+9)$$

$$(7) \quad x^2 - 3x + 1 = 0$$

解の公式に代入する。

$$x = \frac{-(-3) \pm \sqrt{(-3)^2 - 4 \times 1 \times 1}}{2 \times 1}$$

$$x = \frac{3 \pm \sqrt{5}}{2}$$