

入試対策プリント（計算等基本問題） 21日目 解答と解説

【解答】 (1) 11 (2) $\frac{11}{15}x$ (3) $\sqrt{15}$ (4) $x = \frac{1 \pm \sqrt{13}}{2}$ (5) $(x-1)(x-9)$

$$\begin{aligned}(1) \quad & 3 - 4 \times (-2) \\ & = 3 + 8 \\ & = 11\end{aligned}$$

$$\begin{aligned}(2) \quad & \frac{2}{3}(2x - 3) - \frac{1}{5}(3x - 10) \\ & = \frac{4}{3}x - 2 - \frac{3}{5}x + 2 \\ & = \frac{20}{15}x - \frac{9}{15}x - 2 + 2 \\ & = \frac{11}{15}x\end{aligned}$$

$$\begin{aligned}(3) \quad & (\sqrt{10} + \sqrt{5})(\sqrt{6} - \sqrt{3}) \\ & = \sqrt{60} - \sqrt{30} + \sqrt{30} - \sqrt{15} \\ & = 2\sqrt{15} - \sqrt{15} \\ & = \sqrt{15}\end{aligned}$$

$$\begin{aligned}(4) \quad & 2x^2 + 5x + 3 = x^2 + 6x + 6 \\ & 2x^2 - x^2 + 5x - 6x + 3 - 6 = 0 \\ & x^2 - x - 3 = 0 \\ & x = \frac{1 \pm \sqrt{(-1)^2 - 4 \times 1 \times (-3)}}{2} \\ & x = \frac{1 \pm \sqrt{13}}{2}\end{aligned}$$

$$\begin{aligned}(5) \quad & 5x(x-2) - (2x+3)(2x-3) \\ & = 5x^2 - 10x - (4x^2 - 9) \\ & = 5x^2 - 10x - 4x^2 + 9 \\ & = x^2 - 10x + 9 \\ & = (x-1)(x-9)\end{aligned}$$