

数Ⅳ4-1



次の整式 $2x^3 + 9x^2 + 13x + 10$ を整式 $2x + 3$ で割った商と余りを求めよ。

$$\begin{array}{r} x^2 + 3x + 2 \\ 2x+3 \overline{) 2x^3 + 9x^2 + 13x + 10} \\ \underline{-(2x^3 + 3x^2)} \\ 6x^2 + 13x \\ \underline{-(6x^2 + 9x)} \\ 4x + 10 \\ \underline{-(4x + 6)} \\ 4 \end{array}$$

$$\text{答} \left\{ \begin{array}{l} \text{商} \quad x^2 + 3x + 2 \\ \text{余り} \quad 4 \end{array} \right.$$

$$\begin{aligned} & 2 \cdot \left(-\frac{3}{2}\right)^3 + 9 \cdot \left(-\frac{3}{2}\right)^2 + 13 \cdot \left(-\frac{3}{2}\right) + 10 \\ &= -\frac{54}{8} + \frac{81}{4} - \frac{39}{2} + 10 \\ &= 4 \end{aligned}$$