

C コース

$$\textcircled{7} \quad (2a + \frac{2}{3})(2a - \frac{1}{3})$$

$$= 4a^2 + (\frac{2}{3} - \frac{1}{2}) \times 2a + \frac{2}{3} \times -\frac{1}{3}$$

$$= 4a^2 + \frac{1}{3} \times 2a - \frac{2}{9}$$

$$= 4a^2 + \frac{2}{3}a - \frac{2}{9}$$

$$\textcircled{8} \quad (\frac{1}{2}x - 4)(\frac{1}{2}x + 8)$$

$$= \frac{1}{4}x^2 + (-4 + 8) \times \frac{1}{2}x - 4 \times 8$$

$$= \frac{1}{4}x^2 + 4 \times \frac{1}{2}x - 32$$

$$= \frac{1}{4}x^2 + 2x - 32$$

$$\textcircled{9} \quad (ab + 3)(ab + 2)$$

$$= a^2b^2 + (3 + 2)ab + 3 \times 2$$

$$= a^2b^2 + 5ab + 6$$

$$\textcircled{10} \quad (ab - 5)(ab - 1)$$

$$= a^2b^2 + (-5 - 1)ab - 5 \times -1$$

$$= a^2b^2 - 6ab + 5$$

$$\textcircled{11} \quad (xy + 6)(xy - 2)$$

$$= x^2y^2 + (6 - 2)xy + 6 \times -2$$

$$= x^2y^2 + 4xy - 12$$

$$\textcircled{12} \quad (xy - 10z)(xy - 4z)$$

$$= x^2y^2 + (-10z - 4z)xy - 10z \times -4z$$

$$= x^2y^2 - 14xyz + 40z^2$$

D コース

$$\textcircled{7} \quad (3x + \frac{2}{5})(3x + \frac{5}{2})$$

$$= 9x^2 + (\frac{2}{5} + \frac{5}{2}) \times 3x + \frac{2}{5} \times \frac{5}{2}$$

$$= 9x^2 + (\frac{4}{10} + \frac{25}{10}) \times 3x + 1$$

$$= 9x^2 + \frac{29}{10} \times 3x + 1$$

$$= 9x^2 + \frac{87}{10}x + 1$$

$$\textcircled{8} \quad (\frac{1}{5}a - 7b)(\frac{1}{5}a - 3b)$$

$$= \frac{1}{25}a^2 + (-7b - 3b) \times \frac{1}{5}a - 7b \times -3b$$

$$= \frac{1}{25}a^2 - 10b \times \frac{1}{5}a + 21b^2$$

$$= \frac{1}{25}a^2 - 2ab + 21b^2$$

$$\textcircled{9} \quad (ab + 2)(ab + 7)$$

$$= a^2b^2 + (2 + 7)ab + 2 \times 7$$

$$= a^2b^2 + 9ab + 14$$

$$\textcircled{10} \quad (ab + 6)(ab - 8)$$

$$= a^2b^2 + (6 - 8)ab + 6 \times -8$$

$$= a^2b^2 - 2ab - 48$$

$$\textcircled{11} \quad (6a - b)(6a + 5b)$$

$$= 36a^2 + (-b + 5b) \times 6a - b \times 5b$$

$$= 36a^2 + 24ab - 5b^2$$

$$\textcircled{12} \quad (xy - 10z)(xy - 3z)$$

$$= x^2y^2 + (-10z - 3z)xy - 10z \times -3z$$

$$= x^2y^2 - 13xyz + 30z^2$$