

p111:5

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

$$b) (2x-5)^2 = 4x^2 + 25 - 20x$$

$$c) (1-6x)^2 = 1 + 36x^2 - 12x$$

$$d) \left(\frac{x}{2} + \frac{3}{4}\right)^2 = \frac{x^2}{4} + \frac{9}{16} + \cancel{2} \cdot \frac{x}{\cancel{2}} \cdot \frac{3}{4} = \\ = \frac{x^2}{4} + \frac{9}{16} + \frac{3x}{4}$$

$$e) \left(2x^2 - \frac{1}{2}\right)^2 = 4x^4 + \frac{1}{4} - \cancel{2} \cdot 2x^2 \cdot \frac{1}{\cancel{2}} = \\ = 4x^4 + \frac{1}{4} - 2x^2$$

$$f) (ax+b)^2 = a^2x^2 + b^2 + 2abx$$

p111:6

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

$$b) (2x+3)(2x-3) = 4x^2 - 9$$

$$c) \left(\frac{x}{3} - \frac{1}{2}\right)\left(\frac{x}{3} + \frac{1}{2}\right) = \frac{x^2}{9} - \frac{1}{4}$$

$$d) (ax+b)(ax-b) = a^2x^2 - b^2$$