



$$\begin{aligned} (12) \quad & (z+5)^2 \\ & = z^2 + 2 \times z \times 5 + 5^2 \\ & = z^2 + 10z + 25 \end{aligned}$$

$$\begin{aligned} & [(z+5)^2 \neq z^2 + 5^2 \\ & \therefore (a+b)^2 = a^2 + 2ab + b^2] \end{aligned}$$

$$\begin{aligned} (13) \quad & (2a+3b)(a-b) \\ & = 2a(a-b) + 3b(a-b) \\ & = 2a^2 - 2ab + 3ab - 3b^2 \\ & = 2a^2 + ab - 3b^2 \end{aligned}$$

$$\begin{aligned} (14) \quad & (a+4)(a+2) \\ & = a^2 + 2a + 4a + 8 \\ & = a^2 + 6a + 8 \end{aligned}$$

or

$$\begin{aligned} & a^2 + (4+2)a + 8 \\ & = a^2 + 6a + 8 \end{aligned}$$

$$\begin{aligned} (15) \quad & (a-4)(a-2) \\ & = a^2 + [-4+(-2)]a + (-4)(-2) \\ & = a^2 - 6a + 8 \end{aligned}$$

$$\begin{aligned} (16) \quad & \frac{3x^2}{3x^2} \\ & = 1 \end{aligned}$$

$$\left[\begin{aligned} \frac{3x^2}{3x^2} &= 1 \neq 0 \\ 3x^2 - 3x^2 &= 0 \end{aligned} \right]$$