

a)  $8x^3 + 12x^2y + 6xy^2 + y^3$ ;    б)  $a^3 + 3a^2 + 3a + 1$   
в)  $27 + 27b + 9b^2 + b^3$ .

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

$$\begin{aligned} 8x^3 + 12x^2y + 6xy^2 + y^3 &= \\ 2^3x^3 + 3 \cdot 2^2x^2y + 3 \cdot 2xy^2 + y^3 &= \\ (2x)^3 + 3(2x)^2y + 3(2x)y^2 + y^3 &= (2x+y)^3 \end{aligned}$$

$$\begin{aligned} a^3 + 3a^2 + 3a + 1 &= a^3 + 3a^2 \cdot 1 + 3a \cdot 1^2 + 1^3 = \\ (a+1)^3 & \end{aligned}$$

$$\begin{aligned} 27 + 27b + 9b^2 + b^3 &= 3^3 + 3 \cdot 3^2b + 3 \cdot 3b^2 + b^3 = \\ (3+b)^3 & \end{aligned}$$