

$$\begin{array}{llll}
 m^3 + n^3; & б) a^3 + 1; & в) b^3 + 8; & г) x^3 + y^6; \\
 p^6 + q^6; & е) m^6 + n^{15}; & ж) 27a^3 + b^3; & з) x^3 + 64y^3; \\
 c^6 + 125d^3; & к) 8p^6 + q^{12}. & & 
 \end{array}$$

$$m^3 + n^3 = (m+n)(m^2 - mn + n^2)$$

$$a^3 + 1 = a^3 + 1^3 = (a+1)(a^2 - a + 1)$$

$$b^3 + 8 = b^3 + 2^3 = (b+2)(b^2 - b + 2)$$

$$x^3 + y^6 = x^3 + (y^2)^3 = (x+y^2)(x^2 - xy^2 + (y^2)^2) = (x+y^2)(x^2 - xy^2 + y^4)$$

$$p^6 + q^6 = (p^2)^3 + (q^2)^3 = (p^2 + q^2)((p^2)^2 - p^2q^2 + (q^2)^2) = (p^2 + q^2)(p^4 - p^2q^2 + q^4)$$

$$m^6 + n^{15} = (m^2)^3 + (n^5)^3 = (m^2 + n^5)((m^2)^2 - m^2n^5 + (n^5)^2) = (m^2 + n^5)(m^4 - m^2n^5 + n^{10})$$

$$27a^3 + b^3 = 3^3a^3 + b^3 = (3a + b)((3a)^2 - 3ab + b^2) = (3a + b)(9a^2 - 3ab + b^2)$$

$$x^3 + 64y^3 = x^3 + 4^3y^3 = (x + 4y)(x^2 - 4xy + (4y)^2) =$$

$$= (x + 4y)(x^2 - 4xy + 16y^2)$$

$$c^6 + 125d^3 = (c^2)^3 + 5^3d^3 = (c^2 + 5d)((c^2)^2 - c^2 \cdot 5d +$$

$$(5d)^2) = (c^2 + 5d)(c^4 - 5dc^2 + 25d^2)$$

$$8p^6 + q^{12} = 2^3(p^2)^3 + (q^4)^3 = (2p^2 + q^4)((2p^2)^2 - 2p^2q^4 + (q^4)^2) = (2p^2 + q^4)(4p^4 - 2p^2q^4 + q^8)$$

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