

Actividad 7

$$\textcircled{1} \quad x^2 - y^2 = (x-y) \times (x+y)$$

$$\textcircled{2} \quad 4x^2 - 81y^4 = (2x)^2 - (9y^2)^2 \\ = (2x - 9y^2) \times (2x + 9y^2)$$

$$\textcircled{3} \quad 27a^3 - 8b^6 = (3a)^3 - (2b^2)^3 \\ = (3a - 2b^2) \times (a^2 + 6ab^2 + 4b^4)$$

$$\textcircled{4} \quad 64m^3 + 725n^6 = (4m + 5n^2)^3 \\ = (76m^2 - 20mn^2 + 25n^4) \cdot (4m)^3 + (5n^2)^3$$

$$\textcircled{5} \quad m^6 - 216 = m^3 \times 2 - 6a \cdot (m^2)^3 - 6a \\ = (m^2 - 6) \times (m^4 + 6m^2 + 36)$$

$$\textcircled{6} \quad 725x^3 + 7000y^6 = 725(x^3 + 8y^6) \\ = 725(x + 2y^2) \times (x^2 - 2xy^2 + 4y^4)$$

$$\textcircled{7} \quad 700m^2 - 81h^2 = 70^2 m^2 - 9^2 h^2 \\ = (70m)^2 - (9h)^2 = (70m - 9h) \times (70m + 9h)$$

$$\textcircled{8} \quad 49a^4 - 36b^2 = (7a^2 - 6b) \times (7a^2 + 6b)$$