

- a) $(x - 1)(x^2 + x + 1) - (1 + x)(1 - x + x^2)$;
 б) $(a^2 - 3)(a^4 + 3a^2 + 9) + a^4(1 - a)(1 + a)$;
 в) $2p^2(2 - p)(p^2 + 2p + 4) - 4(p - 5)(5 + p)$;
 г) $n^5(2 + n^2)(n^2 - 2) - (m - n^3)(m^2 + mn^3 + n^6)$.

$$1) x^3 - 1 - (1 + x^3) = x^3 - 1 - 1 - x^3 = x^3 - x^3 - 1 - 1 = x^3(1 - 1) - 1 - 1 = x^3 \cdot 0 - 1 - 1 = -1 - 1 = -2$$

$$2) a^6 - 27 + a^4(1 - a^2) = a^6 - 27 + a^4 - a^6 = a^6 - 27 + a^4 - a^6 = -27 + a^4$$

$$3) 2p^2(8 - p^3) - 4(p^2 - 25) = 16p^2 - 2p^5 - 4p^2 + 100 = p^2(16 - 4) - 2p^5 + 100 = 12p^2 - 2p^5 + 100$$

$$4) n^5(n^4 - 4) - (m^3 - n^9) = n^9 - 4n^5 - m^3 + n^9 = -4n^5 - m^3$$