Tests

Darken the circle in front of the correct answers. (1 mark each)

1. Which of the following are the factors of $(a + b)^4 - 3ab(a + b)^2$?
   - $(a + b)(a^3 - b^3)$
   - $(a + b)(a^3 + b^3)$
   - $(a - b)(a^3 - b^3)$
   - $(a - b)(a^3 + b^3)$
2. Which of the following are the factors of $\frac{1}{4}(a + 1)^3 + 2$?
   - $\frac{1}{4}(a + 1)(a^2 - 7)$
   - $\frac{1}{4}(a + 1)(a^2 + 7)$
   - $\frac{1}{4}(a - 3)(a^2 - 3)$
   - $\frac{1}{4}(a + 3)(a^2 + 3)$
3. Which of the following are the factors of $p^2q^4 - 1$?
   - $(pq^2 + 1)(pq^2 - 1)$
   - $(pq^2 + 1)(pq^2 + 1)$
   - $(pq^2 - 1)(pq^2 - 1)$
   - $(p^2q - 1)(pq^2 - 1)$
4. Which of the following are the factors of $9a^4 - c^4 + 4c^2x^2 - 4x^4$?
   - $(3a^2 + c^2 - x^2)(3a^2 - c^2 + x^2)$
   - $(3a^2 + c^2 + x^2)(3a^2 - c^2 - x^2)$
   - $(3a^2 + c^2 - 2x^2)(3a^2 - c^2 + 2x^2)$
   - $(3a^2 + 2c^2 - x^2)(3a^2 - 2c^2 + x^2)$
5. Which of the following are the factors of $2m^3 + 54n^3$?
   - $2(m + 3n)(m^2 - 3mn + 9n^2)$
   - $2(m + 3n)(m^2 + 3mn + 9n^2)$
   - $2(m - 3n)(m^2 + 3mn + 9n^2)$
   - $2(m - 3n)(m^2 - 3mn + 9n^2)$

Name.....No.....M.3/.....

LIVEWORKSHEETS