

Lesson 2.2: Factoring Polynomials**Explore Your Understanding Assignment**

This assignment includes multiple choice questions. For multiple choice questions, select the best answer. Each is worth 1 mark. Be sure to show all necessary work.

- ① _____ 1. The fully factored form of $\frac{1}{2}x^2 - x - 4$ is
- A. $(\frac{1}{2}x - 4)(x + 1)$
 - B. $(\frac{1}{2}x - 1)(x + 4)$
 - C. $(\frac{1}{2}x + 1)(x - 4)$
 - D. $(\frac{1}{2}x + 4)(x - 1)$
- ① _____ 2. One of the factors of the polynomial expression $3x^2 + 9x - 30$ is
- A. $(x - 2)$
 - B. $(x - 3)$
 - C. $(x - 4)$
 - D. $(x - 5)$
- ① _____ 3. The simplified factored form of $8(x + 3)^2 - 6(x + 3) - 5$ is
- A. $(4x + 17)(2x + 5)$
 - B. $(4x + 7)(2x + 7)$
 - C. $(4x + 5)(2x - 1)$
 - D. $(4x - 5)(2x + 1)$

_____ 4. The fully factored form of $25x^2 - 144$ is

- A. $(5x + 12)^2$
- B. $(5x - 12)^2$
- C. $(5x - 12)(5x + 12)$
- D. $(25x - 12)(25x + 12)$

_____ 5. One of the factors of the polynomial expression $4(x - 3)^2 - (y + 4)^2$ is

- A. $(2x - 2 - y)$
- B. $(2x - 2 + y)$
- C. $(4x - 8 + y)$
- D. $(4x - 8 - y)$

You have completed *Lesson 2.2 Explore Your Understanding Assignment*. Please review all work in *Workbook 2A* to ensure it is your best work. Submit *Workbook 2A* for marking at this time and proceed to *Lesson 2.3* in the *Module*.

