

Exercise 8.2

Factorise each of the following polynomials by using factor theorem:

1. $x^3 - 6x^2 + 11x - 6$

2. $x^3 - 3x^2 - x + 3$

3. $x^3 - 8x^2 + x + 42$

4. $x^3 - 19x - 30$

5. $12x^3 + 4x^2 - 3x - 1$

6. $x^3 - 8x^2 + 17x - 10$

7. $x^3 - 2x^2 - 5x + 6$

8. $x^3 + 7x^2 - 21x - 27$

9. $4x^3 - 4x^2 - 21x - 9$

10. $x^3 + 9x^2 + 23x + 15$

Answers **Teach san ban**

1. $(x - 1)(x - 2)(x - 3)$

2. $(x - 1)(x + 1)(x - 3)$

3. $(x + 2)(x - 3)(x - 7)$

4. $(x + 2)(x + 3)(x - 5)$

5. $(2x - 1)(2x + 1)(3x + 1)$

6. $(x - 1)(x - 2)(x - 5)$

7. $(x - 1)(x - 3)(x + 2)$

8. $(x + 1)(x + 9)(x - 3)$

9. $(x - 3)(2x + 1)(2x + 3)$

10. $(x + 1)(x + 3)(x + 5)$