

1.4 Polynomial Division

1. $315 = 13 + \frac{15}{23}$

2. $5x^2 - 4x + 9 = 5x - 14 + \frac{37}{x+2}$

3. $x^3 + x^2 - 2x + 3 = x^2 - 2 + \frac{5}{x+1}$

4. $x^3 + 5 = x^2 + 2x + 4 + \frac{13}{x-2}$

5. $x^3 + 2x^2 - 7x + 8 = x^2 + 3x - 4 + \frac{4}{x-1}$

6. $x^3 + 3x^2 - 4x + 5 = x^2 + 4x + \frac{5}{x-1}$

7. $2x^3 + 4x^2 - x - 5 = 2x^2 - 1 + \frac{-3}{x+2}$

8. $3x^4 - 4x^3 + 5x^2 - 6x + 7 + \frac{-4}{x+1}$

9. $2x^3 + 4x^2 + 7x + 14 + \frac{30}{x-2}$