

Exercices

3.1 Effectuer la division du polynôme $F(x)$ par le polynôme $G(x)$. Ecrire ensuite l'égalité fondamentale de la division.

- | | |
|--|---------------------------------------|
| 1) $F(x) = x^3 - 8x^2 + 16x - 5$ | $G(x) = x - 5$ |
| 2) $F(x) = x^5 - x^4 - 4x^3 + 2x^2 + 3x - 1$ | $G(x) = 2x + x^2 - 1$ |
| 3) $F(x) = 3x^3 - 1 + 5x^4$ | $G(x) = x^2 - 1$ |
| 4) $F(x) = 6x^5 + 5 + 5x^4 - 12x + 31x^2 - 25x^3$ | $G(x) = 2x^2 + 2 - 3x$ |
| 5) $F(x) = 3x^4 - 7x^3 - 18x^2 + 28x + 24$ | $G(x) = 3x^2 + 8x + 4$ |
| 6) $F(x) = -x^3 - x^2 + 5$ | $G(x) = 2x - 3$ |
| 7) $F(x) = 5 + x - 3x^2 + x^5$ | $G(x) = -x^2 + x - 1$ |
| 8) $F(x) = -2x^3 - 3x + 1$ | $G(x) = 3x^3 + x^2 - 1$ |
| 9) $F(x) = 12x^4 + 47x^3 + 10x^2 + 12$ | $G(x) = -3x^2 - 8x + 6$ |
| 10) $F(x) = -4x^4 - 7 + 2x^3$ | $G(x) = -5$ |
| 11) $F(x) = -4x^4 + 2x^3 - 7$ | $G(x) = -2x^3$ |
| 12) $F(x) = 7x^2 + 2 - 3x$ | $G(x) = 7x + 2x^3$ |
| 13) $F(x) = 42$ | $G(x) = 3x^2 - 4x + 1$ |
| 14) $F(x) = 4x^4$ | $G(x) = 1 + 2x^2 - 5x$ |
| 15) $F(x) = x^{12} - 1$ | $G(x) = x^6 - 1$ |
| 16) $F(x) = x^{12} - 1$ | $G(x) = x^4 - 1$ |
| 17) $F(x) = x^{12} - 1$ | $G(x) = x^8 + x^4 + 1$ |
| 18) $F(x) = x^5 - 32$ | $G(x) = x - 2$ |
| 19) $F(x) = x^4 - a^4$ | $G(x) = x - a$ |
| 20) $F(x) = x^5 + a^5$ | $G(x) = x + a$ |
| 21) $F(x) = x^4 + a^4$ | $G(x) = x + a$ |
| 22) $F(x) = \frac{5}{8}x^2 - \frac{7}{12}x - \frac{1}{3}$ | $G(x) = \frac{5}{4}x + \frac{1}{2}$ |
| 23) $F(x) = -\frac{1}{3}x^4 + 2x^2 - \frac{1}{2}$ | $G(x) = \frac{3}{2}x^2 + \frac{1}{3}$ |
| 24) $F(x) = \frac{2}{5}x^4 - \frac{3}{4}x^3 + \frac{1}{2}x^2 - \frac{2}{3}x$ | $G(x) = -\frac{3}{5}x$ |