

Factoriser les expressions suivantes :

$$\begin{aligned}A &= 2x^2 + 3x \\ &= 2x \times x + 3x \\ &= x(2x + 3)\end{aligned}$$

$$\begin{aligned}B &= 5x^2 - 2x \\ &= 5x \times x - 2x \\ &= x(5x - 2)\end{aligned}$$

$$\begin{aligned}C &= 12x^2 + 35x \\ &= 12x \times x + 35x \\ &= x(12x + 35)\end{aligned}$$

$$\begin{aligned}D &= 6x^2 - 5x \\ &= 6x \times x - 5x \\ &= x(6x - 5)\end{aligned}$$

$$\begin{aligned}E &= 2x^2 + 6x \\ &= 2x \times x + 3 \times 2 \times x \\ &= 2x(x + 3)\end{aligned}$$

$$\begin{aligned}F &= 14x^2 + 21x \\ &= 2 \times 7x \times x + 3 \times 7x \\ &= 7x(2x + 3)\end{aligned}$$

$$\begin{aligned}G &= -30x^2 + 10x \\ &= -3 \times 10x + 10x \times 1 \\ &= 10x(-3x + 1)\end{aligned}$$

$$\begin{aligned}H &= 6x^2 - 12x \\ &= 6x \times x - 2 \times 6x \\ &= 6x(x - 2)\end{aligned}$$

$$\begin{aligned}I &= 3x^2 + x \\ &= 3x \times x + x \times 1 \\ &= x(3x + 1)\end{aligned}$$

$$\begin{aligned}J &= x^2 + 4x \\ &= x \times x + 4x \\ &= x(x + 4)\end{aligned}$$

$$\begin{aligned}L &= -x^2 + 2x \\ &= -x \times x + 2x \\ &= x(-x + 2) \\ &= x(2 - x)\end{aligned}$$

$$\begin{aligned}
 M &= -x^2 + x \\
 &= -x \times x + x \\
 &= x(-x + 1) \\
 &= x(1 - x)
 \end{aligned}$$

$$\begin{aligned}
 N &= 4a^2 - a \\
 &= 4a \times a - a \times 1 \\
 &= a(4a - 1)
 \end{aligned}$$

$$\begin{aligned}
 O &= -m^2 + 4m \\
 &= -m \times m + 4m \\
 &= m(-m + 4) \\
 &= m(4 - m)
 \end{aligned}$$

$$\begin{aligned}
 P &= 2x^5 + 4x^3 \\
 &= 2x^3 \times x^2 + 2 \times 2x^3 \\
 &= 2x^3(x^2 + 2)
 \end{aligned}$$

$$\begin{aligned}
 Q &= 6r^6 - 5r^4 + 7r^2 \\
 &= 6r^4 \times r^2 - 5r^2 \times r^2 + 7r^2 \\
 &= r^2(6r^4 - 5r^2 + 7)
 \end{aligned}$$

$$\begin{aligned}
 R &= -2t^8 + 5t^5 - 13t^4 \\
 &= -2t^4 \times t^4 + 5t^4 \times t - 13t^4 \\
 &= t^4(-2t^4 + t - 13)
 \end{aligned}$$