FACTORISATIONS : Connection : 16 à 21

16) $3x^5 + 2x^2 - 7x^4$

$= (x^2 \times) 3x^3 + (x^2 \times) 2 + (x^2 \times)(-7 \times x^2)$

$= x^2 (3x^3 + 2 - 7x^2)$

$x^5 = x \times x \times x \times x \times x$

$x^2 \times x^3$

$x^{m+n} = x^m \times x^n$

17) $-5x^5 + 2x^2 - x^3$

$= (x^2 \times)(-5x^3) + 2(\times x^2) - (x^2 \times)x$

$= x^2 (-5x^3 + 2 - x)$

18) $11x^4 + 3x^2 - 5x$

$= (x \times) 11x^3 + (x \times) 3x - 5(\times x)$

$= x(11x^3 + 3x - 5)$

19) $-6x^8 + 2x^7 + x^6$

$= (x^6 \times)(-6x^2) + 2x(\times x^6) + (x^6 \times) 1$

$= x^6 (-6x^2 + 2x + 1)$

20) $(16x - 1)(2x + 3) - (3x - 4)(4x + 6)$

$= (16x - 1)\times(2x+3) - (3x-4)(2 \times (2x+3))$

$= (2x+3)((16x-1) - (3x-4)(2))$

$= (2x+3)(16x - 1 - 6x + 8) = (2x+3)(10x + 7)$

21) $(-8 + 5x)(2x + 3) + (24 - 15x)$

$= (-8 + 5x) \times (2x+3) + (-3 \times (-8 + 5x))$

$= (-8 + 5x)((2x+3) + (-3))$

$= (-8 + 5x)(2x) = 2x(-8 + 5x)$