

FACTORIZATIONS : Connection: 16 à 21

$$\begin{aligned} 16) & 3n^5 + 2n^2 - 7n^4 \\ &= \boxed{n^2 \times 3n^3} + \boxed{n^2 \times 2} + \boxed{n^2 \times (-7n^2)} \\ &= n^2 (3n^3 + 2 - 7n^2) \end{aligned}$$

$$\begin{aligned} n^5 &= \underbrace{n \times n \times n \times n \times n}_{n^2 \times n^3} \\ &= n^{m+n} = n^m \times n^n \end{aligned}$$

$$\begin{aligned} 17) & -5n^5 + 2n^2 - n^3 \\ &= \boxed{n^2 \times (-5n^3)} + \boxed{2 \times n^2} - \boxed{n^2 \times n} \\ &= n^2 (-5n^3 + 2 - n) \end{aligned}$$

$$\begin{aligned} 18) & 11n^4 + 3n^2 - 5n \\ &= \boxed{n \times 11n^3} + \boxed{n \times 3n} - \boxed{5 \times n} \\ &= n (11n^3 + 3n - 5) \end{aligned}$$

$$\begin{aligned} 19) & -6n^8 + 2n^7 + n^6 \\ &= \boxed{n^6 \times (-6n^2)} + \boxed{2n \times n^6} + \boxed{n^6 \times 1} \\ &= n^6 (-6n^2 + 2n + 1) \end{aligned}$$

$$\begin{aligned} 20) & (16n - 1)(2n + 3) - (3n - 4)(2n + 6) \\ &= (16n - 1) \boxed{(2n + 3)} - (3n - 4) \boxed{(2 \times (2n + 3))} \\ &= (2n + 3) \left((16n - 1) - (3n - 4)(2) \right) \\ &= (2n + 3) (16n - 1 - 6n + 8) = (2n + 3) (10n + 7) \end{aligned}$$

$$\begin{aligned} 21) & (-8 + 5n)(2n + 3) + (24 - 15n) \\ &= \boxed{(-8 + 5n) \times (2n + 3)} + \boxed{(-3 \times (8 + 5n))} \\ &= (-8 + 5n) \left((2n + 3) + (-3) \right) \\ &= (-8 + 5n) (2n) = 2n (-8 + 5n) \end{aligned}$$