

Please go straight into groups. Discuss homework.

$$\textcircled{18} \quad 6p^2 + 33p - 18$$

$$3(2p^2 + 11p - 6)$$

$$3(2p^2 + 12p - 1p - 6)$$

$$3(2p(p+6) - 1(p+6))$$

$$\boxed{3(2p-1)(p+6)}$$

$$\begin{array}{c} -12p^2 \\ \wedge \\ 12p \quad -1p \end{array}$$

$$\textcircled{27} \quad 7a^3 + 2a^2 + 42a + 12$$

$$a^2(7a+2) + 6(7a+2)$$

$$(7a+2)(a^2+6)$$

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(38)  $4n^2 + 32n + 64$

$$4(n^2 + 8n + 16)$$

$$4(n+4)(n+4)$$

or

$$4(n+4)^2$$

(45)  $64x^3 - 27y^3$

$$(4x)^3 - (3y)^3$$

$$(4x-3y)(4x^2 + 4x \cdot 3y + (3y)^2)$$

$$(4x-3y)(16x^2 + 12xy + 9y^2)$$

$$\textcircled{34} \quad 8m^3 + 32m^2 - 8m - 32$$

$$8(m^3 + 4m^2 - m - 4)$$

$$8(m^2(m+4) - 1(m+4))$$

$$8(m+4)(m^2 - 1)$$

$$8(m+4)(m-1)(m+1)$$

$$343p^3 + 196p^2 + 196p + 112$$

$$7(49p^3 + 28p^2 + 28p + 16)$$

$$\downarrow 7(7p^2(7p + 4) + 4(7p + 4))$$

$$7(7p^2 + 4)(7p + 4)$$

$$25x^2 - 16y^4$$

$$(5x)^2 - (4y^2)^2$$

$$a^2 - b^2 = (a - b)(a + b)$$

$$(5x - 4y^2)(5x + 4y^2)$$

$$\textcircled{1} \quad x^2 + 3x - 28$$
$$(x+7)(x-4)$$

$$\textcircled{2} \quad x^4 + 3x^2 - 28$$
$$(x^2 + 7)(x^2 - 4)$$

$$\textcircled{3} \quad x^2 - 7x + 10$$
$$(x-5)(x-2)$$

$$\textcircled{4} \quad x^4 - 7x^2 + 10$$
$$(x^2 - 5)(x^2 - 2)$$

$$\textcircled{5} \quad x^{100} - 7x^{50} + 10$$

$$(x^{50} - 5)(x^{50} - 2)$$

$$\textcircled{6} \quad x^{90} - 7x^{45} + 10$$

$$(x^{45} - 5)(x^{45} - 2)$$

$$\textcircled{40} \quad 18k^4 + 48k^2 + 32$$

$$2(9k^4 + 24k^2 + 16)$$

$$2(\underbrace{9k^4 + 12k^2}_{\text{green}} + \underbrace{12k^2 + 16}_{\text{green}})$$

$$\begin{array}{l} 144k^4 \\ 12k^2 \quad 12k^2 \end{array}$$

$$2(3k^2(3k^2+4) + 4(3k^2+4))$$

$$2(3k^2+4)(3k^2+4)$$

$$2(3k^2+4)^2$$

$$\textcircled{31} \quad 100n^2 - 16$$

$$4(25n^2 - 4)$$

$$4(5n - 2)(5n + 2)$$

$$\textcircled{34} \quad 8m^3 + 32m^2 - 8m - 32$$

$$8(m^3 + 4m^2 - m - 4)$$

$$8(m^2(m+4) - 1(m+4))$$

$$8(m+4)(m^2-1)$$

$$8(m+4)(m-1)(m+1)$$

FACTOR

$$2x^4 - 10x^2 - 72$$

$$2(x^4 - 5x^2 - 36)$$

$$2(x^2 - 9)(x^2 + 4)$$

$$2(x-3)(x+3)(x^2+4)$$