

مراجعة الفصل الرابع من الباب الأول

المقادير الجبرية

$$1) (3x + 4)(5x + 2) = 15x^2 + 26x + 8$$

$$\begin{aligned}(3x + 4)(5x + 2) &= 3x(5x + 2) + 4(5x + 2) \\ &= (3)(5)x^{1+1} + (3)(2)x + (4)(5)x + (4)(2) \\ &= 15x^2 + 6x + 20x + 8 \\ &= 15x^2 + 26x + 8\end{aligned}$$

A) صواب

B) خطأ

$$2) 3x^2(4x^5 - 10x^2 - 2x + 6) = \dots\dots\dots$$

$$\begin{aligned}&= (3)(4)x^{2+5} - (3)(10)x^{2+2} - (3)(2)x^{2+1} + (3)(6)x^2 \\ &= 12x^7 - 30x^4 - 6x^3 + 18x^2\end{aligned}$$

A) $12x^7 - 30x^4 - 6x^3 + 18x^2$

B) $12x^{10} - 30x^4 - 6x^2 + 18$

c) $12x^3 - 30 - 6x + 18x^2$

D) $12x^5 - 30x^2 - 6x + 18$

$$3) \frac{14x^7y^{12} - 21x^3y^5 + 7x^2y^2}{7x^2y^2} = \dots\dots\dots$$

$$\begin{aligned}\frac{14x^7y^{12} - 21x^3y^5 + 7x^2y^2}{7x^2y^2} &= \frac{14x^7y^{12}}{7x^2y^2} - \frac{21x^3y^5}{7x^2y^2} + \frac{7x^2y^2}{7x^2y^2} \\ &= 2x^{7-2}y^{12-2} - 3x^{3-2}y^{5-2} + 1 \\ &= 2x^5y^{10} - 3xy^3 + 1\end{aligned}$$

A) $2x^5y^{10} - 3xy^3 + 1$	B) $2x^5y^{10} - 3xy^3$
c) $2x^9y^{14} - 3x^5y^7 + x^4y^4$	D) $2x^{3.5}y^6 - 3x^{1.5}y^{2.5} + xy$

$$4) (2x^7 + 3) + (10x^7 - 3) = \dots$$

$$(2x^7 + 3) + (10x^7 - 3) = 2x^7 + 10x^7 + 3 - 3 = (2 + 10)x^7 + 0$$

$$= 12x^7$$

A) $20x^7 - 9$	B) $12x^7$
c) $12x^7 - 6$	D) لا شيء مما سبق

$$5) (2x^8 + 3x + 4) - (-7x^8 + 3x + 5) = \dots$$

$$= (2x^8 + 3x + 4) + (7x^8 - 3x - 5)$$

$$= 2x^8 - 7x^8 + 3x - 3x + 4 - 5 = (2 + 7)x^8 + (3 - 3)x - 1$$

$$= 9x^8 + 0x - 1 = 9x^8 - 1$$

A) $-5x^8 + 6x + 9$	B) $-5x^{16} - 1$
c) $9x^8 - 1$	D) $-5x^{16} + 6x^2 + 9$