10/9　　Unit 2: Review

① find the sum (x^2+3x+1) and $(2x^2-x-4)$ $^+$ CLT

$$3x^2+2x-3$$

② Multiply. $(5m^2)(-2m)(6m^4) = -60m^7$

③ From $-3x^2-4x-10$ subtract $6x^2-10x+9$

— change signs

$$\underline{-6x^2+10x-9}$$

$$-9x^2+6x-19$$

④ Divide $8x^3-14x^2+2x$ by $-2x$

$$\frac{8x^3}{-2x} \quad \frac{-14x^2}{-2x} \quad \frac{2x}{-2x} \Rightarrow -4x^2+7x-1$$

⑤ Combine like terms.

$$\underline{16m^3}\boxed{+4m}-7+\underline{10m^3}\boxed{-6m}+9$$

$$26m^3-2m+2$$

⑥ find the product $(n+6)$ and $(n-7)$ FOIL "box"

	n	+6
n	n^2	6n
-7	-7n	-42

$$n^2-7n+6n-42$$

$$n^2-n-42$$

$$n^2-n-42$$

⑦ perimeter: sides of △ are $3x-1, 5x+2, x-7$

CLT

$$9x-6$$

⑧ Simplify $-3(4x-6)+9x$

$$\frac{-12x+18 \quad +9x}{-3x+18}$$

⑨ Perimeter of a SQUARE is $24x+40$, find one side of the SQ.

4 sides ⟶ $\dfrac{24x+40}{4} = \dfrac{24x}{4} + \dfrac{40}{4} = 6x+10$

⑩ $34,000,000$ would be 3.4×10^n, find n.

7

$n = 7$

⑪ Find the <u>area</u> of <u>rectangle</u>, sides are $(x-5)(x+9)$ and

$l \cdot w$

$(x-5)(x+9)$ FOIL/BOX

$x^2 \boxed{+9x-5x} -45$

$x^2 +4x -45$

⑫ $x^0 + 6\boxed{(2x)^0}$

$\downarrow \qquad\quad \downarrow$

$1 + 6(1)$

$1 + 6$

7

⑬ $5\boxed{x^0}$

$\downarrow$

$5 \cdot 1$

5

⑭ $7p^2 - (3p^2+5) \Rightarrow 7p^2 - 3p^2 - 5$

change signs

$= 4p^2 - 5$

⑮ $(-4m^3)^2 \Rightarrow (-4m^3)(-4m^3) = 16m^6$

⑯ $1-2$

(16) $4^{-2} \Rightarrow \dfrac{1}{4^2} = \dfrac{1}{16}$