

Algebra 1

TUES. 5-14-13

CLASS NOTES

WS Practice

$$\textcircled{3} (2r^4 - 3) + (5r^4 - 8)$$

$$\underline{2r^4} \textcircled{-3} + \underline{5r^4} \textcircled{-8}$$

$$\boxed{7r^4 - 11}$$

$$\textcircled{7} \left(\frac{5}{2}x - \frac{9}{8}x^3 \right) - \left(\frac{9}{8}x - \frac{3}{2}x^3 \right)$$

$$\underline{\frac{5}{2}x} - \frac{9}{8}x^3 \quad \underline{-\frac{9}{8}x} + \frac{3}{2}x^3$$

$$\underline{\frac{20}{8}x} \textcircled{-\frac{9}{8}x^3} \quad \underline{-\frac{9}{8}x} \textcircled{+\frac{3}{2}x^3}$$

$$\frac{11}{8}x \textcircled{-\frac{9}{8}x^3} \quad \textcircled{+\frac{12}{8}x^3}$$

$$\frac{11}{8}x + \frac{3}{8}x^3$$

$$\boxed{\frac{3}{8}x^3 + \frac{11}{8}x}$$

$$\textcircled{13} (4x+6y)(6x+8y)$$

$$\underline{24x^2} + 32xy + 36xy + 48y^2$$

$$24x^2 + 68xy + 48y^2$$

$$\textcircled{19} (2m+4)(8m^2+8m-4)$$

$$16m^3 + 16m^2 - 8m$$

$$+ 32m^2 + 32m - 16$$

$$16m^3 + 48m^2 + 24m - 16$$

$$(37) \left(\frac{29}{8}b + \frac{11}{5}\right)^2$$

$$\frac{29^2}{64}b^2 + 2\left(\frac{29}{8} \cdot \frac{11}{5}\right)b + \frac{121}{25}$$

$$\begin{array}{r} 29 \\ 29 \\ \hline 261 \\ 58 \\ \hline 841 \end{array}$$

$$\boxed{\frac{841}{64}b^2 + \frac{319}{20}b + \frac{121}{25}}$$

$$(45) (2n+1)(2n-1)$$

$$\boxed{4n^2 - 1}$$

$$(a+b)(a-b)$$

$$a^2 - \cancel{ab} + \cancel{ab} - b^2$$

$$a^2 - b^2$$

DO5

Review: Exponent RULES

$$\textcircled{1} \frac{(-2N^2 \cdot 2N^0)^4}{-2N^{-4}}$$

$$\frac{(-2N^2 \cdot 2)^4}{-2N^{-4}}$$

$$\frac{(-4N^2)^4}{-2N^{-4}}$$

$$\frac{-2N^{-4}}{-2N^{-4}}$$

$$\frac{+256N^8 N^4}{-2}$$

$$-128N^{12}$$

Step-by-step

- MR $a^m \cdot a^n = a^{m+n}$
- DR $\frac{a^m}{a^n} = a^{m-n}$
- ZER $a^0 = 1$
ex: $0^0 = 0$
- NER $a^{-m} = \frac{1}{a^m}$
or $\frac{1}{a^{-m}} = a^m$
- PPR $(a^m)^n = a^{m \cdot n}$
- GRP $\left(\frac{a^m}{c^d}\right)^n = \frac{a^{m \cdot n}}{c^{d \cdot n}}$
- FER $a^{\frac{m}{n}} = \sqrt[n]{a^m}$

$$(-2)^3 = -8$$

$$-(2^4) = -16$$

$$(-2)^4 = +16$$

$$(-2)^0 = 1$$

$$-(2)^0 = -1$$

$$-(2^0) = -1$$

Mr C