

EXPONENTS + ROOTS REVIEW

$$\frac{(2a^{-3}b^4)^{-2}(3a^2b^{-5}c^3)^3}{(4a^{-5}b^7c^{-2})(25a^9b^{-6}c^{42})}$$

$$\frac{(3a^2b^{-5}c^3)^3}{(2a^{-3}b^4)^2(4a^{-5}b^7c^{-2})}$$

$$\frac{27a^6b^{-15}c^9}{(4a^{-6}b^8c^2)(4a^{-5}b^7c^{-2})}$$

$$\frac{27a^6b^{-15}c^9}{16a^{-11}b^{15}c^9}$$

$$\frac{27a^{17}c^9}{16b^{30}}$$

$$\frac{8^3}{8^{-5} \cdot 8^1}$$

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

$$\boxed{8^7}$$

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$$\frac{6(x^2y^3)}{5^0 + 2x^0y^0}$$

$$= \frac{6 \cdot 1}{1 + 2 \cdot 1 \cdot 1}$$

$$= \frac{6}{1+2} = \frac{6}{3} = \textcircled{2}$$

$$\left(\frac{2x^4}{y^{-3}}\right)^{-3}$$

$$\left(\frac{y^{-3}}{2x^4}\right)^3$$

$$= \frac{y^{-9}}{8x^{12}}$$

$$= \frac{1}{8x^{12}y^9}$$

$$\frac{6.3 \times 10^5}{(4 \times 10^7)(2.1 \times 10^{-1})}$$

$$= \frac{6.3 \times 10^{5-6}}{8.4 \times 10^6}$$

$$= 0.75 \times 10^{-1-1}$$

$$= 7.5 \times 10^{-2}$$

$$\sqrt[4]{9x^7y^8z^2} \cdot \sqrt[4]{18x^7y^{10}z^{20}}$$

$$= \sqrt[4]{162x^{14}y^{18}z^{22}}$$

$2^4 = 16$   
 $3^4 = 81$   
 $4^4 = 256$

$$= 3x^3y^4z^5 \sqrt[4]{2x^2y^2z^2}$$

$$y = -2\sqrt[3]{x+1} + 4$$

Left ↑      Up ↑

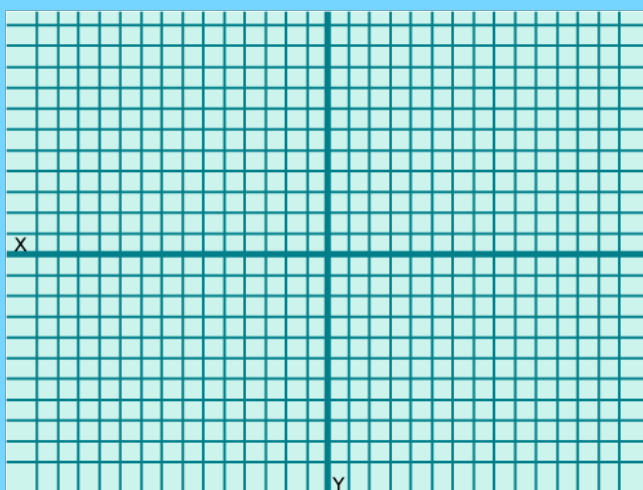
|   |    |
|---|----|
| 0 | 0  |
| 1 | -2 |
| 8 | -4 |

$$y = \sqrt{4-x}$$

$$y = \sqrt{-(x-4)}$$

Right 4

|   |   |
|---|---|
| 0 | 0 |
| 1 | 1 |
| 4 | 2 |
| 5 | 3 |



Power Regression

$$y = a x^b$$

Fits

Parabolas + Squarulas