

Pg. 464-465: 1, 2, 4-10 (e), 19-23 (o), 26 (e), 33-57 (o)

① B

② A

④  $\frac{1}{343}$

⑥  $\frac{1}{8}$

⑧  $a^3$

⑩  $x^6$

⑱ 4

⑳ 11

㉓ 6

㉖  $\frac{1}{8}$

㉘ 1

㉚ x

㉛  $x^6$

㉝ 1,296

㉞ 3

㉟ 10

㊱  $\frac{1}{625}$

㊳  $\frac{-8}{27}$

㊴  $\frac{81}{x^4}$

㊵  $\frac{x^5}{y^5}$

㊷  $(\frac{6a}{b^2})^3 = \frac{6^3 a^3}{b^6} = \frac{216a^3}{b^6}$

㊸  $5x^3 y^2$

㊹  $6a^8 b^3$

㊻  $\frac{96x^4}{y}$

㊽  $\frac{24y}{3x^2}$

㊿  $\frac{9x^2 y^2}{2}$

Review of  
O.T.L.

Feb. 22, 2007

$$\frac{7^6}{7^9} = 7^{6-9} = 7^{-3} \stackrel{\text{Exp. Form}}{\downarrow} = \frac{1}{\underline{\underline{7^3}}} \text{ or } \frac{1}{\underline{\underline{343}}}$$

$$\frac{3^9}{3^5} = 3^{9-5} = \underline{\underline{3^4}} \stackrel{\text{Exp. Form}}{=} \underline{\underline{81}}$$

$$\frac{8^2}{8^3} = 8^{2-3} = 8^{-1} \stackrel{\downarrow}{=} \underline{\underline{\frac{1}{8}}}$$

$$\frac{5^{20}}{5^5} = 5^{20-5} = \underline{\underline{5^{15}}}$$

$$\frac{9^5}{9^?} = 9^{-6}$$

What is "?"

$$9^{5-?} = 9^{-6}$$

$$5 - ? = -6$$

$$\begin{array}{r} -5 \quad -5 \\ \hline \end{array}$$

$$\begin{array}{r} -? = -11 \\ \hline -1 \quad -1 \end{array}$$

$$\underline{\underline{? = 11}}$$

$$\left(\frac{1}{5}\right)^4 = \frac{1^4}{5^4} = \frac{1}{\underline{\underline{625}}}$$

$$\begin{array}{r} 125 \\ 5 \\ \hline 625 \end{array}$$

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$$\left(\frac{1}{6}\right)^4 = \frac{1^4}{6^4} = \frac{1}{\underline{\underline{1296}}}$$

$$\begin{array}{r} 3 \\ 36 \\ \hline 216 \\ 6 \\ \hline 1296 \end{array}$$

Do First <sup>2<sup>nd</sup></sup> Neg. Exp. &/or  
 1<sup>st</sup> ( )<sup>exp.</sup>: Get rid  
 of the ( )

$$\frac{4xy}{2x^{-1}y^{-3}} \cdot \left( \frac{2xy^2}{3xy} \right)^{-2}$$

$$\frac{4xy}{2x^{-1}y^{-3}} \cdot \frac{2^{-2}x^{-2}y^{-4}}{3^{-2}x^{-2}y^{-2}} = \frac{4xy}{2} \cdot \frac{9x^2y^2}{4}$$

*(Note: In the original image, the first fraction is simplified to 2xy and the second to 9x^2y^2/4. The final result is 9x^2y^2/2.)*

or  
 put at  
 the end

$$= \frac{9x^2y^2}{2}$$

$$\frac{6x^2y^2}{xy^3} \cdot \frac{(4x^2y)^2}{xy^2}$$

$$= \frac{\cancel{6}x^{\cancel{2}}y^{\cancel{2}}}{\cancel{x}y^{\cancel{3}}} \cdot \frac{16x^4y^2}{\cancel{x}y^{\cancel{2}}} = \frac{96x^4}{\underline{\underline{y}}}$$

Turn in if not already

① Pg 452-453

21-61 (odd)

Do 10 of the Evens  
from y-day