

January 8th

Due Today: HW 6.2

Due Next Class: HW 6.3

Unit 6: Exponents

Lesson 6.3 Exponents Laws continued



Get Ready: Check your Homework HW 6.2

1) $4p^6$

2) 1

3) $-\frac{3n}{2}$

4) $16x^3$

5) $\frac{8y^9}{x^9}$

6) $\frac{2}{x^5}$

7) $-x^5$

8) $\frac{1}{x^3y^2}$

9) $-6z^4y^6x$

10) 1

11) $\frac{1}{x^3y^3z}$

12) $8xy^2$

13) $\frac{y^2}{9x^5}$

14) $16y^8$

15) $\frac{64c^{15}}{a^9b^9}$

16) $\frac{n^{12}}{m^{14}p^2}$



16 $\frac{(m^3 n^{-4})^{-4}}{m n p^2 \cdot m n^3}$

$\frac{m^{-12} n^{16}}{m^2 n^4 p^2}$

$-12 - 2 = -14$
 $16 - 4 = 12$

$\frac{m^{-14} n^{12}}{p^2}$

$= \frac{n^{12}}{m^{14} p^2}$

HW 6.2 Questions

⑥

$$\frac{2x^{-4}y^2}{x^1y^2}$$

$$-4-1=-5$$

$$2x^{-5}$$

$$\frac{2}{x^5}$$

(14)

$$\frac{+x^4 y^{-3}}{+2x^4 y^{-1}}$$

$$\begin{aligned} \frac{\cancel{x^{-16}} y^{12}}{2^{-4} \cancel{x^{-16}} y^4} &= \frac{y^{12}}{2^4 y^4} \\ &= \frac{2^4 y^8}{y^4} \\ &= 2^4 y^8 \\ &= \boxed{16y^8} \end{aligned}$$

$$(12) \quad xy^2 \cdot (2x^0)^3$$

$$xy^2 \cdot 8$$

$$8xy^2$$

$$\frac{(4x^3y^2)^2}{x^2y^{-3}} \cdot \left(\frac{x^2y^{-1}}{2xy^0}\right)^3$$

$$\frac{16x^6y^4}{x^2y^{-3}} \cdot \frac{x^6y^{-3}}{8x^3y^0} = \frac{16x^{12}y}{8x^5y^{-3}} = \boxed{2x^7y^4}$$

Tic-Tac-Toe

Class Goal: 150 points

Products 2 pts Powers 3 pts Quotients 5 pts

Multiplier

1x

The Rules:**Work with a partner on the same problem on your own paper.**

2x

Each pair will earn points and a stamp for each problem you get correct. Both people must have the work correct to get a stamp.

3x

You must complete at least 1 problem in each column.**Bonus Row questions can only be attempted once!****We are working toward a class total of 150 points to move up the Math Mountain!**

Bonus

5x

Any pair who reaches 35 points will receive a piece of candy.

Tic Tac Toe Groups

Alg C

Caden + Matt

Rossaly + Brianly

Monia + Jasmine

Marley + Bridgette

Taj + Alex

Ruby + Huley

Nikki + Maryam

Zac + Heiber

Ariana + Jaileen

Tic Tac Toe Groups

Alg E

Natalie + Layth + ~~Daniel~~

~~Nathan + Anelie~~

Jennifer + Kayin

Matthew + Halley

Tom + Yanilsa

Jormaris + Gabby

Tommy + Jayda

Jonah + Neyse → Anelie

Tic-Tac-Toe			Class Goal: 150 points
Multiplier	Products 2 pts	Powers 3 pts	Quotients 5 pts
1x	$b^{-1} \cdot 3b$	$3v^3 \cdot (v^3)^2$	$\frac{4n^2}{n^3 n^{-1}}$
2x	$4x^0 y^3 \cdot 2xy^{-1}$	$(2x^3 y^{-3} \cdot y^2)^3$	$\frac{(n^2)^{-1}}{n^{-4} \cdot 2n^{-3}}$
3x	$x^0 y^2 \cdot -yx^{-1}$	$(-2x^2 y^0)^{-1} \cdot -x^{-1}$	$\frac{-a^{-3} b^4 \cdot (a^3 b^{-1})^3}{-a^{-3} b^{-4}}$
Bonus 5x	$h^0 j^{-4} k^4 \cdot -2h^2 j^{-2} k^3$	$(-y^0)^4 \cdot -2xy$	$\frac{(-2x^{-3} y^{-2})^3 \cdot 2yx^{-2}}{yx^2}$

Recap

Key Points

Due Next Time:

VN+HW 6.3

Next Class: