JEOPARDY!

$100	$100	$100	$100	$100
$200	$200	$200	$200	$200
$300	$300	$300	$300	$300
$400	$400	$400	$400	$400
$500	$500	$500	$500	$500

Exponents: Negative and Zero

Exponents: Multiplication

Exponents: Division

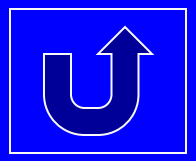
Scientific Notation

Exponential Functions

Exponents: Neg. and 0	Exponents: Multiplication	Exponents: Division	Scientific Notation	Exponential Functions
$100	$100	$100	$100	$100
$200	$200	$200	$200	$200
$300	$300	$300	$300	$300
$400	$400	$400	$400	$400
$500	$500	$500	$500	$500

CATEGORY 1 - $100

$$a^{4} \cdot b^{0} \cdot a^{-4}$$



CATEGORY 1 - $200

$$g^{-3}d^{4} \bullet d^{-8}$$

CATEGORY 1 - $300

$$\frac{4xy^{-3}z^{6}}{16a^{-4}b}$$

CATEGORY 1 - $400

$$h^{-3}v^{6} \bullet -4h^{2}v^{-3}$$

CATEGORY 1 - $500

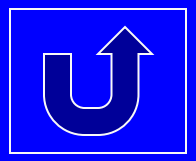
$$(4c^{-4}d^{9})^{3} \bullet c^{12}$$

CATEGORY 2 - $100

$$3x^{12} \bullet 4x^{6}$$

CATEGORY 2 - $200

$$-4k^{3} \cdot 6k^{9} \cdot -5k^{-4}$$



CATEGORY 2 - $300

$$\left(-3y^3z^5\right)^2$$

CATEGORY 2 - $400

$$(4cd)^2(2c^4d^{-5})$$

CATEGORY 2 - $500

$$(-2x)\bullet(4y)\bullet(-3x^4y^2)^3$$

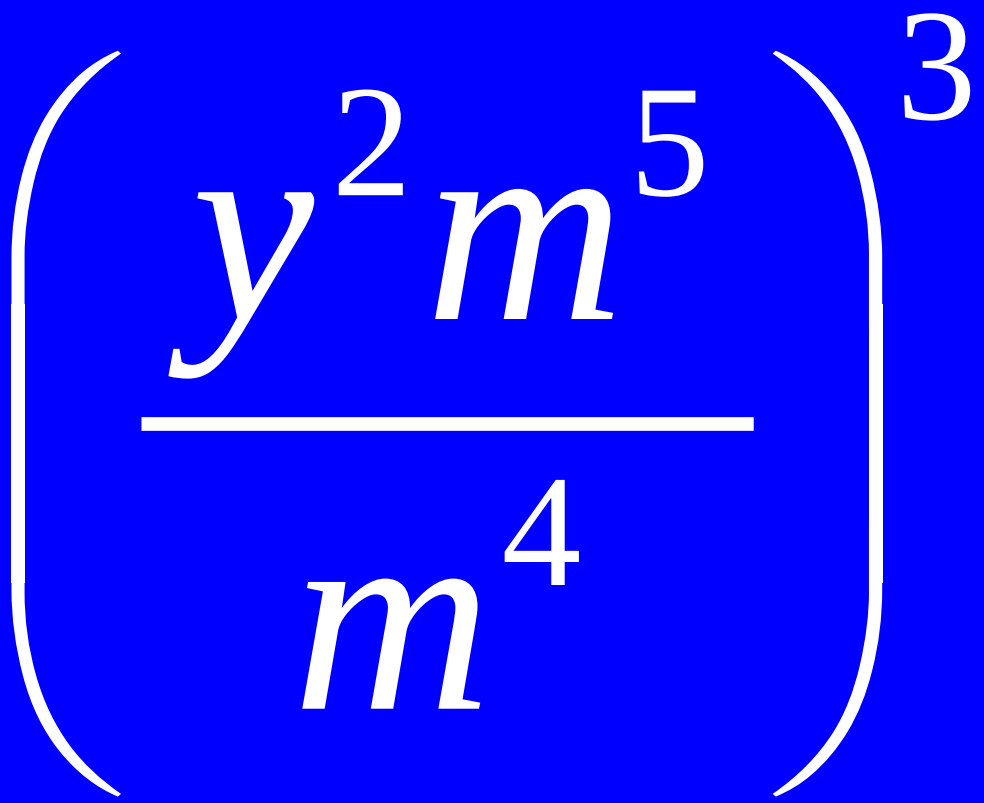
CATEGORY 3 - $100

$$\frac{4g^5}{10g^2}$$

CATEGORY 3 - $200

$$\frac{a^9 b^5 c}{a^5 b^{12} c^3}$$

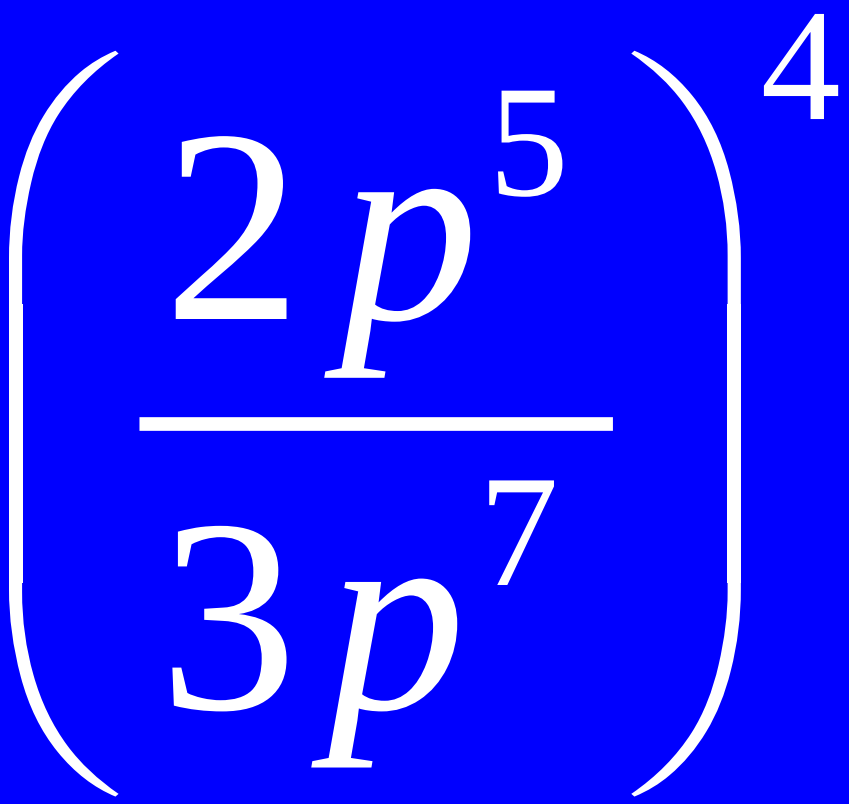
CATEGORY 3 - $300



CATEGORY 3 - $400

$$\frac{-12r^{7}g^{8}}{4r^{-6}g^{3}}$$

CATEGORY 3 - $500



CATEGORY 4 - $100

Write the following Number in Scientific Notation

54,000,000,000

CATEGORY 4 - $200

Write the following Number in Standard Form

9.17×10^{-5}

CATEGORY 4 - $300

Simplify the Expression in Scientific Notation

$$(5.6\times10^{-4})(1.4\times10^{-7})$$

CATEGORY 4 - $400

Simplify the Expression in Scientific Notation

$$\frac{\left(5.25\times10^{12}\right)}{\left(3.5\times10^{3}\right)}$$

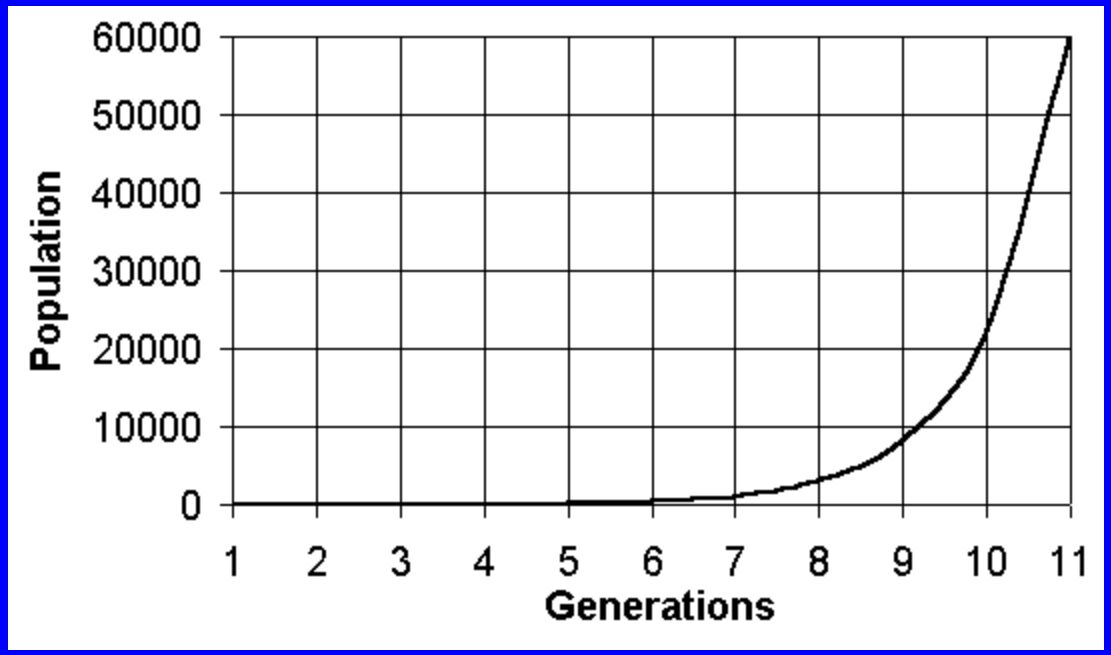
CATEGORY 4 - $500

Simplify the Expression in Scientific Notation

$$\frac{\left(8.633\times10^{-11}\right)}{\left(8.9\times10^{-3}\right)}+\left(1.2\times10^{-9}\right)$$

CATEGORY 5 - $100

Exponential Growth or Decay?



CATEGORY 5 - $200

Exponential Growth or Decay?

Day	Fractional Part of the Rock Remaining
1	1
2	$\frac{1}{2}$
3	$\frac{1}{4}$
4	$\frac{1}{8}$

CATEGORY 5 - $300

The value, *y, of a $15,000 investment over x years* is represented by the equation

$$y = 15000(1.2)^x$$

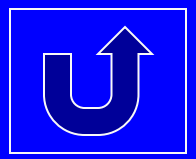
What is the investment worth after 6 years?

CATEGORY 5 - $400

Kathy plans to purchase a car that depreciates (loses value) at a rate of 14% per year. The initial cost of the car is $21,000. Which equation represents the value, *v, of the car after 3 years?*

CATEGORY 5 - $500

The population of Henderson City was 3,381,000 in 1994, and is growing at an annual rate of 1.8%. If this growth rate continues, what will the approximate population of Henderson City be in the year 2000?



CATEGORY 1 - $100

1

CATEGORY 1 - $200

$$\frac{1}{g^3 d^4}$$

CATEGORY 1 - $300

$$\frac{1xz^6a^4}{4y^3b}$$

CATEGORY 1 - $400

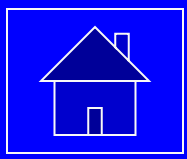
$$\frac{-4v^3}{h}$$

CATEGORY 1 - $500

$64d^{27}$

CATEGORY 2 - $100

$$12x^{18}$$



CATEGORY 2 - $200

$120k^8$

CATEGORY 2 - $300

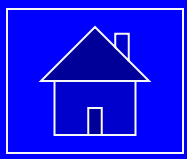
$$9y^6z^{10}$$

CATEGORY 2 - $400

$$\frac{32c^6}{d^3}$$

CATEGORY 2 - $500

$$216x^{13}y^{7}$$



CATEGORY 3 - $100

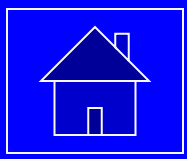
$$\frac{2g^3}{5}$$

CATEGORY 3 - $200

$$\frac{a^4}{b^7 c^2}$$

CATEGORY 3 - $300

$$y^6 m^3$$



CATEGORY 3 - $400

$$-3r^{13}g^{5}$$

CATEGORY 3 - $500

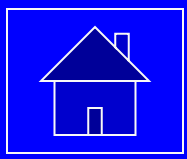
$$\frac{16}{81p^8}$$

CATEGORY 4 - $100

5.4×10^{10}

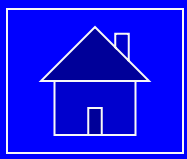
CATEGORY 4 - $200

0.0000917



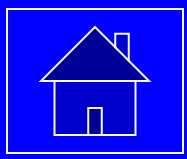
CATEGORY 4 - $300

7.84×10^{-11}



CATEGORY 4 - $400

1.5×10^{9}

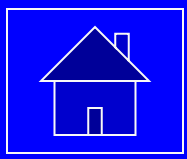


CATEGORY 4 - $500

$$1.09 \times 10^{-8}$$

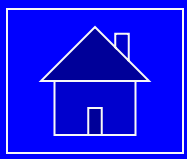
CATEGORY 5 - $100

Growth



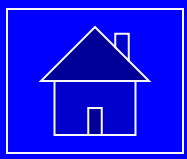
CATEGORY 5 - $200

Decay



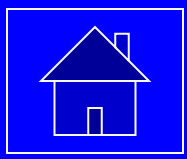
CATEGORY 5 - $300

$44,789.76



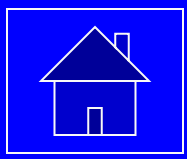
CATEGORY 5 - $400

$13,357.18



CATEGORY 5 - $500

3,762,979



FINAL JEOPARDY!

Can You Evaluate??

FINAL CATEGORY

Evaluate the Following Expression in Fraction Form

$x = -3$, $y = 2$, and $z = 7$

$$6x^{-2}y^{-4}z$$

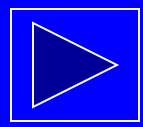
FINAL CATEGORY

$$\frac{7}{24}$$

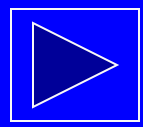
END OF GAME

Daily Doubles and
usage notes follow...

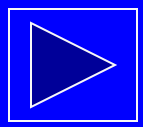
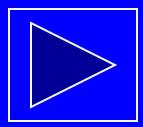
DAILY DOUBLE



DAILY DOUBLE



DAILY AUDIO DOUBLE



DAILY VIDEO DOUBLE