Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Homework: Monday, September 19, 2015**

***TRY YOUR BEST! SHOW ALL OF YOUR WORK! ☺☺ NO WORK! NO CREDIT!***

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **COMPUTERS** The byte is the fundamental unit of computer processing. The byte is based on powers of 2, as shown in the table. How many times greater is a gigabyte than a megabyte?

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| **Memory Term** | **Number of Bytes** |
| byte | $2^{0}$ or 1 |
| kilobyte | $$2^{10}$$ |
| megabyte | $$2^{20}$$ |
| gigabyte | $$2^{30}$$ |

 | What is the best approximation for $\sqrt{38}$ ?Simplify the following expression: $3\sqrt{100}+45$ |
| Simplifya. $7$-2 b. 80c. $(-5)^{-5}$ d. $3^{-2}$  | Is -33 a rational number? Which Real Number set(s) does it belong to? |

**Homework: Tuesday, September 20, 2016**

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| Write the equivalent fraction to the following:0$.1\overbar{23}$ | **TEST** The teacher marked Silvano’s problem wrong on his test.$$(4^{5})^{4}=4^{9}$$Explain what he did wrong and give the correct answer. |
| **Simplify.****a.** $(6t^{5})^{2}$ **b.** $(4w^{9})^{4}$**c.** $(12k^{6})^{3}$ **d.** $(15m^{8})^{3}$ | Simplify**e.** $2^{-6}•2^{3}$ **f.** $s^{-5}•s^{7}$**g.** $\frac{m^{8}}{m^{-4}}$ **h.** $\frac{10^{8}}{10^{9}}$ |

**Homework: Wednesday, September 21, 2016**

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| **CRAFTS** Numa loves beads and wants to know which amount would be more, a thousand beads or $(6^{2})^{3}$ beads? | **GAMING** A video-game designer is using the expression $6n^{3}$ in a program to determine points earned, where *n* is the game level. Simplify the expression for the $n^{2}$ level. |
| Write the equivalent fraction to the following:$$.4\overbar{53}$$ | **Simplify****a.** $(\frac{3}{5}a^{6}b^{9})^{2}$ **b.** $(4x^{2})^{3}(3x^{6})^{4}$ **c.** $ (0.6p^{5})^{3}$ **d.** $(\frac{1}{5}w^{5}x^{3})^{2}$ |

**Homework: Thursday, September 22, 2016**

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| **Simplify using only positive exponents.** | **TRAVEL** The formula *s* $=\sqrt{18d}$can be used to find the speed *s* of a car in miles per hour when the car needs *d* feet to come to a complete stop after slamming on the brakes. If it took a car 12 feet to come to a complete stop after slamming on the brakes, estimate the speed of the car. |
| **Order from least to greatest.****a.** 8, 10, $\sqrt{61}$, $\sqrt{71}$ **b.** $\sqrt{45}$, 9, 6, $\sqrt{63}$  | **Simplify****a.** $(4d^{3}e^{5})^{7}$ **b.** $(-4r^{6}s^{15})^{4}$ **c.** $[(7^{2})^{2}]^{2}$ **d.** $[(3^{2})^{2}]^{3}$ |