1. Write as a fraction in simplest form: $0 . \overline{57}$
2. Simplify using Exponent Laws; 'drop bars' for extra credit, and write all exponents positive.
a. $8 a^{2} b^{3}\left(-4 a^{3} b^{3}\right)$
b. $\frac{-24 a^{2} b}{18 a b^{5}}$
3. Evaluate and express the result in Scientific Notation.
a. $\left(9.75 \times 10^{3}\right)\left(8.4 \times 10^{-6}\right)$
b. $\left(7.2 \cdot 10^{7}\right)\left(1.82 \cdot 10^{2}\right)$
c. $\frac{6.256 \cdot 10^{8}}{6.8 \cdot 10^{4}}$
d. $\frac{2.888 \cdot 10^{5}}{7.22 \cdot 10^{2}}$
4. Evaluate and express the result in Scientific Notation
a. $\left(7.3 \cdot 10^{5}\right)+3,400,000$
b. $\left(1.78 \cdot 10^{4}\right)+\left(5.35 \cdot 10^{3}\right)$
c. $\left(1.03 \cdot 10^{9}\right)-\left(4.7 \cdot 10^{7}\right)$
d. $\left(8.4 \cdot 10^{7}\right)-\left(6.3 \cdot 10^{6}\right)$
5. Mr. Ford is shipping a care package to a former student. Mr. Ford chose a square box with the dimensions shown. What is the volume of the box expressed as a monomial?
6. There are about $2.5 \bullet 10^{10}$ red blood cells int the average adult. How many adults
 would it take to have a total of 1 googol $\left(1 \cdot 10^{100}\right)$ red blood cells?
7. Solve the equations.
a. $q^{2}=\frac{81}{576}$
b. $a^{3}=-2.197$
8. Write the missing words in order on your answer page!
"A ratio of $\qquad$ integers?
Oh, no! You $\qquad$ write me!

My $\qquad$ does not $\qquad$ ,
Nor does it $\qquad$ ,
I am number $\qquad$ ,
Yes, I'm CRAZY!
Don’t mess with ME!!!

