

Mathematics Review for Chemistry

Name _____

Grade _____



1. Solve the following: Which one produces the largest value? Why?

$$\frac{25 \times 3 \times 8}{6 \times 9}$$

$$25 \times 3 \div 6 \times 8 \div 9 =$$

$$\frac{25 \times 8}{6} \times \frac{3}{9} =$$

2. Three friends order one pizza cut into eight slices (Yum). They decide to have equal portions. (Hmm) How many slices does each friend get to eat?
3. In a galaxy far, far away there is no knowledge of fractions. Express $1/200$ in decimal form (don't use a calculator for this problem, please).
4. Multiplying the numerator and denominator of a fraction by the same thing (a number, a variable, or an algebraic expression) has what effect on the fraction?
5. Show mathematically with an example how dividing can yield the same answer as multiplying by the reciprocal.
6. $5 \times 8 \times 3 =$ $5 \times 3 \times 8 =$ $5 \div 8 \div 3 =$ $5 \div 3 \div 8 =$
- What information can we gain from this exercise?
7. Getting back to the pizza from question 2: it is decided to give one of the friends $1/12$ of the pizza that was originally ordered and $1/3$ of a second pie (instead of the original way of dividing the first pie). How much of the pizza with this friend get?

8. Solve for x: $y = (9/5)x + 32$ $x =$

9. Density = mass / volume volume =

10. A line has a slope of 0.362 and a y intercept of 5.1, What is the x intercept?
Equation for the line: $y = 0.362x + 5.1$

11. You have 40 m&m candies. You find that 15% of the candy is red. How many are red?

12. $[18/4]^{1/2} =$

13. Given: $T / C = 4$ If $T = 44$, what is the value of C ?
If C is tripled, what happens to the value of T ?
(Think of T as the number of tires and C as the number of cars.)