# MATH QUIZ

## 8th grade – IV Partial

**Student's Name:** _____

**Teacher's Name:** Mr. Gutierrez **Score:** _____

**School Year:** 2020 – 2021 **Points: 20%**

**Topics:** Multiplying powers, Dividing powers, Multiplying monomials

**Date:** _____

**Teacher Comment:**

### PART I. TRUE OR FALSE — 6 pts. (1 pt. each)

**Instructions:** Write in the parenthesis a **T** if the statement is true and an **F** if it is false. **If the answer is false, justify your answer by filling in the blank.**

1. To **multiply powers** that have the same base, add exponents and keep the same base.. ( )
   _____
2. To solve the problem $x^6 / x^3$ write out the problem in long form ..... ( )
   _____
3. One rule for **dividing powers** is to divide powers that have the same base when the dividend exponent is greater than the divisor exponent..... ( )
   _____
4. To divide powers **subtract** the dividend exponent from the divisor exponent and write as **a fraction** ..... ( )
   _____
5. To **multiply a monomial by a monomial,** multiply the numerical coefficients together and multiply the literal coeffients together..... ( )
   _____
6. Is this monomial correct? $(4xy)(2x^2y) = \mathbf{8x^3y^2}$..... ( )
   _____

### PART II. PRACTICE — 14 pts (1 pt. each)

**Instructions:** Solve the following exercises about Multiplying Powers, Dividing Powers and Multiplying Monomials.

1. ***Multiply. Do not solve numerical coefficients. (5pts. / 1pt. each)***

a) $5^4 \cdot 5^2 =$

b) $6^3(6^2) =$

c) $x^3 \cdot x \cdot x^4 =$

d) $x^3(x^2)(y^3)(y) =$

e) $5^2(5)(5^5) =$

2. **Divide**. **(3pts. / 1 pt. each)**

a) $\frac{X^9}{X^8}$ =

b) $\frac{a^7}{a^4}$ =

c) $\frac{m^4}{m^3}$

3. ***Complete the chart. (4pts. / 1pt. each)***

| Algebra | English |
|---|---|
| $y^3-4$ | |
| | Eight added to x times x |
| | One half x times y |
| $2\ (x^2 + y^2)$ | |

4. ***Multiply these monomials.*** ***(2 pts. /1pt. each)***

***a) (6x)(5y) =***

***b) (5a)(2b)(6c) =***


"The only person who is educated is the one who has learned how to learn ...and change."

**Mr. Gutierrez**