

Notes: Day 1: Order of Operations

Date _____ Period _____

1) A few things we need to remember:

A. Order of Operations

* Paranthesis – This means do anything contained within a grouping symbol (parenthesis, brackets, division bars, square roots, exponents, absolute value, etc). Follow the order of operations within the grouping symbol:

Grouping Symbols (these function just like Paranthesis)

-Absolute Value

-Roots

-Brackets

-Fractions (Numerator/Denominator)

* Exponents – This means evaluate any exponents

* Multiply/Divide – This means do all multiplication and division (from left to right)

* Add/Subtract – This means do all addition and subtraction (from left to right)

Evaluate each expression. Simplify completely (You must show at least two steps on each problem. Problems with an expression with a fraction bar must show two steps each for the top and bottom). NO CALCULATORS!

2) $4 + 4 - 3$

3) $8 \div (3 + 1)$

4) $1 + 5^2$

5) $2 + 6 \div 6$

6) $(16 - 1) \div (4 + 1)$

7) $((1 + 1) \times 2) \div 4$

$$8) 5 + 6 - 1^2$$

$$9) 15 \div (4 + 3 - 4)$$

$$10) 3 + 3 + 6^2 + 1$$

$$11) (16 - 3 - (7 - 6)) \div 4$$

$$12) 4 \times 6 - 8 \div 4 + 3$$

$$13) 6(2^3 - 1) + 5$$

$$14) (-6) + 5 + 5 - 1 + 4$$

$$15) (4 - 2)(5 - (-6) + 6)$$

$$16) (-4) \times 6 | 2 |$$

$$17) (-2) \times \frac{-8}{(-4) \times (-1)}$$

$$18) 1 + 8 + |2 - 4| - 2$$

$$19) -\frac{7}{7} - 2 + -10 + 8 - -6$$