

- 1) Know the properties we studied (the foldable). They will be matching on the test.
- 2) True/False. Write out the word for your answer. If false, provide a counterexample.
 - a) Absolute value is always positive
 - b) Two negatives in a row equal a positive
 - c) All rational numbers are real numbers
 - d) All real numbers are rational numbers
 - e) When evaluating expressions, you do exponents before addition
 - f) The commutative property is true for addition and multiplication only
- 3) Simplify the following expressions
 - a) $2^2 + 5 - 12(-3)^2$
 - b) $[(3 \cdot 7) + 1] \div (18 - 16)$
- 4) Evaluate each expression. Show work with steps for full credit.
 - a) $\frac{15 \div 3 + 2 \cdot 3}{2(5+6)}$
 - b) $2 \cdot 3^2 \div 3$
 - c) $\frac{(2 \cdot 5)^2 + 4}{3^2 - 5}$
 - d) $\frac{2a+b}{3}$ when $a = 4$ and $b = 1$
- 5) Be able to perform all operations with integers and show work for your answer.
 - a) $-7 + (-8)$
 - b) $15 + (-11)$
 - c) $17 + (-9) + 10 + (-6)$
 - d) $(-3)(x)(7)$
 - e) $(-2x)(-4)(x)$
 - f) $(-3x)^2$
 - g) $\frac{2}{3} \div \frac{1}{5}$
 - h) $\frac{16}{\frac{4}{3}}$
 - i) $\frac{x^2}{5} \div -4$
- 6) Simplify each expression. Show work for full credit.
 - a) $3x^2 - 4 + 4x^2$
 - b) $(6x - 1)(-4x)$
 - c) $10x + (3x + 2)(-2)$
 - d) $x^2 - (x + x^2)$
 - e) $2x(3 - x) + x^2$
- 7) Write a paragraph explaining the order of operations. Use complete sentences.
- 8) Make sure you can classify a number by all sets it falls into. (Real, Rational, Irrational, Integer, Whole, and Natural).
 - a) $-\frac{3}{4}$
 - b) π
 - c) 5
 - d) $\sqrt{7}$
- 9) Make sure you can turn written verbal expressions into algebraic expressions.
 - a) Five less than the product of nine and a number squared
 - b) The quotient of n and the number five