

Math 099 - Assignment 3

February 12, 2019

Name key
Score _____

Show all work to receive full credit. Supply explanations when necessary. This assignment is worth 5 points.

1. Evaluate each expression. You may use a calculator, but think about, and discuss, the order of the operations.

$$(a) 3 + 2 \cdot (-5) = 3 + (-10) = \boxed{-7}$$

$$(b) 2.5 \times 8 + 7 \times 2 = 20 + 14 = \boxed{34}$$

$$(c) (2 - 2) - 2 - 2 - [2 \times (2 - 2)] = 0 - 2 - 2 - (2 \times 0) = -2 - 2 = \boxed{-4}$$

$$(d) 9 \div 3^2 \cdot (-6) = 9 \div 9 \cdot (-6) = 1 \cdot (-6) = \boxed{-6}$$

$$(e) \frac{|2 - 8|}{3 - 9} = \frac{6}{-6} = \boxed{-1}$$

$$(f) 3.25 \times 7 - 5.2 \times 8.1 = 22.75 - 42.12 = \boxed{-19.37}$$

2. Refer back to each problem above, and state whether your answer is a natural number, whole number, integer, rational number, or real number.

(a) INTEGER, RATIONAL, REAL

(b) NATURAL, WHOLE, INTEGER, RATIONAL, REAL

(c)

(d) } INTEGER, RATIONAL, REAL

(e)

(f) RATIONAL, REAL

3. Let $x = 2.45$. Evaluate $3x^2 - 2x + 5$.

$$3(2.45)^2 - 2(2.45) + 5$$

$$= 18.0075 - 4.9 + 5$$

$$= \boxed{18.1075}$$