Pre-Algebra Midterm Additions

1. Simplify the following expressions:

1. b. c. d.

2. Identify the following as Prime or composite numbers

a. 31 \_\_\_\_\_\_\_ b. 121 \_\_\_\_\_\_\_ c. 51 \_\_\_\_\_\_\_ d. 81 \_\_\_\_\_\_\_\_\_ e. 231 \_\_\_\_\_\_\_\_

3. Factor the composite numbers from #2a, b, c, d, & e above

i. \_\_\_\_\_\_\_\_\_\_\_\_\_ ii . \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ iii. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ iv. \_\_\_\_\_\_\_\_\_\_\_

4. Identify the components of this expression by filling in the blank:

1. \_\_\_\_\_ is a base in the equation b. \_\_\_\_\_ is a coefficient c. \_\_\_\_\_ is squared

d. \_\_\_\_\_ is an exponent e. \_\_\_\_\_ is a variable in the equation f. \_\_\_\_\_ is cubed

5. Convert the following to mixed fractions

a. \_\_\_\_\_ b. \_\_\_\_\_ c. = \_\_\_\_\_

6. Convert the following to improper fractions

a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_

7. Check which are successfully divisible (yes/no)

a. divisible by 2? 123,456 \_\_\_\_\_ b. divisible by 3 ? 123,456 \_\_\_\_\_

371115 \_\_\_\_\_ 371115 \_\_\_\_\_

654321 \_\_\_\_ 654321 \_\_\_\_\_

c. divisible by 4? 123,456 \_\_\_\_\_ d. divisible by 9 ? 123,456 \_\_\_\_\_

371115 \_\_\_\_\_ 371115 \_\_\_\_

654321 \_\_\_\_\_ 654321 \_\_\_\_

e. divisible by 5? 123,456 \_\_\_\_\_ f. divisible by 6 ? 123,456\_\_\_\_\_

371115 \_\_\_\_\_ 371115 \_\_\_\_\_

654321 \_\_\_\_\_ 654,321 \_\_\_\_

*Pre – Algebra extra midterm Answers:*

1a) undefined 6a)

b) 0 b)

c) 0 c)

d) undefined

2a) prime 7a) yes

b) composite no

c) composite no

d) composite

e) composite 7b) yes

yes

3i) 121 = 11 x 11 = 112  yes

ii) 81 = 3 x 3 x 3 x3 = 34

iii) 231 = 3 x 7 x 11 7c) yes

iv) 51 = 3 x 17 no

no

4a) bases: 7, y & 4

b) coefficients: 6 & 1 7d) no

c) 7 yes

d) 2, 3, & 5 no

e) x or y

f) y 7e) no

yes

5a) 8 no

b) 6 7f) yes

c) 11 no

no