

Pre – Algebra Ch.4 Test **Review**

Name: _____

Period: _____ Date: _____

1.) 8pts.

Find the prime factorization of each number

Ex. $18 = 2 \cdot 3 \cdot 3$

12

8

21

20

2.)

Find the prime factorization of each monomial 8pts. Ex. $12x^2y = 2 \cdot 2 \cdot 3 \cdot x \cdot x \cdot y$

$6y^3$

$9t^2$

$14xyz^2$

$25n^4$

3.)

Find the GCF of each set of numbers 8pts. Ex. 15 and 25 GCF = 5

12 and 16

14 and 35

11 and 44

16 and 64

4.) 4pts.

Find the GCF of each set of monomials 8pts. Ex. $32x^2$ and $4xy^2$ GCF = $4xy$

$12xy$ and $15x$

$24n^2$ and $16n$

5.)

Simplify each fraction 8pts. Ex. $\frac{3}{12} = \frac{1}{4}$

$$\frac{14}{18}$$

$$\frac{24}{36}$$

$$\frac{32}{48}$$

$$\frac{28}{35}$$

6.) divide each monomial 8pts. Ex. $\frac{14x^3}{7x} = 2x^2$

$$\frac{64m^2}{16m}$$

$$\frac{33x^3y^2}{11xy}$$

$$\frac{49n^2m}{7n}$$

$$\frac{x^4y^6}{x^2y^5}$$

7.) Find the product of each expression using exponents. 8pts. Ex. $2^2 \cdot 2^3 = 2^5$

$$5^3 \cdot 5^6$$

$$(4x^7)(6x^3)$$

$$(4^4)(4^5)$$

$$(x^2y)(xy^2)$$

8.)

Write each expression using positive exponents 8pts. Ex. $4^{-2} = \frac{1}{4}$

$$3^{-3}$$

$$t^{-6}$$

$$(3x)^{-2}$$

$$2z^{-1}$$

9.) 6pts. Write each number in standard form Ex. $3.45 \times 10^3 = 3,450$

5.23×10^4

6.206×10^{-3}

9.0×10^{-1}

10.) 6pts Write each expression in scientific form. Ex. $0.0234 = 2.34 \times 10^{-2}$

$345,000$

$1,520,000$

0.00054