2-9-1 Integer Arithmetic Review

Simplify the following.

b)
$$\sqrt{81} =$$

$$\sqrt{16} =$$

$$\sqrt{1} =$$

$$\sqrt{25} =$$

Estimate the following square roots without a calculator. Then see how close the guess is with a calculator.

c)
$$\sqrt{26} =$$

$$\sqrt{56} =$$

$$\sqrt{13} =$$

$$\sqrt{3} =$$

Write the number in words.

Change the following to mixed numbers. e) 23/4 $^{3}/_{2}$

$$^{15}/_{2}$$

Change the following to improper fractions. f) $3^{2}/_{5}$

$$(3^{2})_{5}$$

$$4^{1}/_{8}$$

$$7^{2}/_{7}$$

Raise the following fractions. g) $^{2}/_{3}$ to 24^{ths}

$$^{5}/_{8}$$
 to 56^{ths}

$$^{7}/_{8}$$
 to 24^{ths}

Reduce the following.

h)
$$^{144}/_{168}$$

Write the following as percentages.

$$^{2}/_{3}$$

3/4

 $2^{4}/_{5}$

Write the following percentages as decimal numbers and fraction numbers.

List the coefficient, variable and exponent of the following terms.

$$7x^2y^3$$

 $-y^3$

Add the following.

$$1)$$
 2.5 + 3 + 0.234

$$2\frac{3}{4} + 7\frac{1}{2}$$

Multiply the following.

$$(2\frac{3}{4})(7\frac{1}{2})$$

Perform the indicated operation.

n)
$$-3 + (-4) + (-3) =$$

$$5 + 6.2 + 23 + 2.6 =$$

$$0.032 + (-7.87) =$$

$$3.54 + (-3.44) + (-2.3) =$$

p)
$$4 + (-5) =$$

$$(1/2)(-2)(-1 \ 1/2) =$$

s)
$$\frac{4(-3)}{-6}$$
 $\frac{4(-3)(-5)}{-6(-2)(-1)}$

 $2.3\sqrt{8-4}$

Evaluate the exponential expressions. t) 3^4

 $2x^35x^4$

 $(3a^3)^5$

 $\frac{7x^5y^3}{14x^2y^7}$

Write the following in scientific notation.

u) 0.0000034

34,500,000,000,000

Write the following in decimal notation.

7.8 x 10⁻⁸

Simplify the following.

w)
$$\sqrt{3600} =$$

∛3375

Write the property that allows the following.

$$(x) 3(4+5) = 4(4) + 3(5)$$

$$4(-5) = -5(4)$$

2(3x4) = (2x3)4

Distribute the following.

$$4x(2x - 5)$$

$$2xy(3x - 7y)$$

Simplify.

z)
$$\frac{3(2+5)^2}{14}$$
 =

$$(3(2+1))^2 =$$

$$4+6(12-\sqrt{81})-3=$$