Name: Key

7th Grade Math – Test 1

9/21/2016

(3) 1) Evaluate the expression (show all your work!): $(2^3 - 6)^2 - 1$

$(8-6)^2 - 1$

$(2)^2 - 1$

$4 - 1 = 3$

(3) 2) Evaluate the expression: $(1 + 5) * 4 + 8 * 9$

$6 \cdot 4 + 8 \cdot 9$

$24 + 72 = 96$

(1) 3) What property is shown by: $a + b = b + a$?

Commutative prop. of (+)

(1) 4) What property is shown by: $a(b + c) = ab + ac$

Distributive prop.

(2) 5) Give an example of the identity property of multiplication.

$2 \cdot 1 = 2$

(2) 6) Use the following numbers to set up an equation to demonstrate the associative property of multiplication: 4, 5, 7

$(4 \cdot 5)7 = 4(5 \cdot 7)$

7) Evaluate the following expressions for $b = 5$.

(8) a) $2b + (10)$ $= 20$

b) $b - 2$ (3)

c) $b^2 - 15$

$25 - 15 = 10$

d) $7 * 2 - b$

$14 - 5 = 9$.

8) Fill in the blank to make the equation work.

(4) a) $2 + \underline{-2} = 0$

b) $4 + \underline{0} = 4$

c) $6 * \underline{1} = 6$

d) $9 * \underline{0} = 0$

9) Evaluate the following expressions. Be sure to show all your steps.

(12) a) $(18 + 9) * 4 - 3$

$27 \cdot 4 - 3$ 105

$105 - 3 = 102$

b) $5(10 * 7 - 8^2) - 2$

$5 \cdot (10 \cdot 7 - 64) - 2$

$5 \cdot (70 - 64) - 2$

$5 \cdot 6 - 2$

$30 - 2$

28

c) $(17 + 4) * (14 + 8) - 4^2$

$21 \cdot 22 - 4^2$

$21 \cdot 22 - 16$

462

-16

446

d) $(11 + 65 - 5^2) \div (5 - 2)$

$11 + 65 - 25 \div (5 - 2)$

$76 - 25$

51

$51 \div 3$

17

10) What is the order of operations? (Give the actual words, not just the abbreviation)

(3) Parentheses, exponents, multiplication, division, add, subtract.

11) Translate the following expressions into WORDS!

a) $3 * (9 + x)$

(4) 3 times the sum of 9 and x.

b) $5 \div x - 7$

5 divided by x minus 7.

c) $x/2$

x divided by 2

d) $6x + 1$

6 times x plus 1.

12) Translate the following words into EXPRESSIONS!

a) y minus the quotient of 4 and b.

(8) $y - 4/b$

b) 2 times the sum of x and 9

$2 \cdot (x+9)$

c) the product of x and 4

$x \cdot 4$

d) 3 less than y times 7

$y \cdot 7 - 3$

Name: Key
7th Grade Math – Test 2
10/18/2016

1) Write the following in words.

(8)

a) $x + 5$ x plus 5

b) $8x$ 8 times x

c) $x/2$ x divided by 2

d) $7 - x$ 7 minus x.

2) Evaluate the following expressions for the given values.

(6)

a) $6x + 7y - 2x$; use $x = 1$ and $y = -3$ $6(1) + 7(-3) - 2(1) = 6 - 21 - 2 = -17$

b) $-x + 4(y - 3x)$; use $x = 20$ and $y = 10$ $-20 + 4(10 - 3(20)) = -20 + 4(-50)$ 60 -220

3) Match the following equations with the properties they represent.

(3)

D	$a * b = b * a$	A) Identity Property of Addition
E	$1 * x = x$	B) Distributive Property
F	$(ab)x = a(bx)$	C) Commutative Property of Addition
C	$a + b = b + a$	D) Commutative Property of Multiplication
A	$x + 0 = x$	E) Identity Property of Multiplication
B	$a(b + c) = ab + ac$	F) Associative Property of Multiplication

4) Translate the following into EQUATIONS:

(4)

a) The quotient of 12 and y is 15 $12 \div y = 15$

b) The sum of 5 and x is 20 $5 + x = 20$

5) Solve the following equations. Show ALL your work!

(8)

a) $x - 5 = 2$ (+5 / +5) $x = 7$

b) $x + 8 - 9 = 20$ $x - 1 = 20$ (+1 / +1) $x = 21$

c) $\frac{4x}{4} = \frac{24}{4}$ $x = 6$

d) $7x - 5x = -18$ $\frac{2x}{2} = \frac{-18}{2}$ $x = -9$

6) a) What are the two things required to have like terms? The same letter and exponent.

(2)

b) The letter in an equation is always the variable.

7) Simplify the following expressions by combining like terms.

(8)

a) $5x + 2y + 7y - 8x$ $-3x+9y$

b) $4x^2 + 6x - 10x^2$ $-6x^2+6x$

c) $-2x + 11 + 6x$ $4x+11$

d) $-4x - 10x$ $-14x.$

8) Find the sum of the following expressions:

(8)

a) $21 + (-19)$ $=2$

b) $-128 + (-101)$ -229

c) $-19 + 11 + (-10)$ -18

d) $43 + (-14) + 20$ 49

(2) 9) Evaluate: $(1)(1)(+2)(+2)(+3)(+5)(-1)$ -60

10) Find the absolute value and evaluate the following:

(4)

a) $|20|$ 20

b) $|-7|$ 7

c) $6 - |-4|$ 4 $=2$

d) $10 + |-15|$ $25.$

11) Multiply the following expressions.

(8)

a) $-7(-10)$ 70

b) $(6)(-13)$ -78

c) $2(16)$ 32

d) $(-12)11$ $-132.$

12) Find the difference of the following expressions:

(8)

a) $-5 - 11$ -16

b) $2 + (+12)$ 14

c) $-16 + (+16)$ 0

d) $5 - 5$ 0

Name: Key
7th Grade – Test 3
11/22/2016

1) For the steps of adding and subtracting fractions, fill in the following blanks.

(3)

1) Get everything in fraction form.
2) Find a common denominator using the LCM.
-Multiply the top and bottom by what is missing.
3) Add/subtract the numerators as normal.
4) Simplify the fraction.

2) Add/subtract the following fractions. (8)

a) $\frac{3}{5}-\frac{7}{5}$ $-\frac{4}{5}$

b) $\frac{1}{5}-\frac{3}{5}+\frac{2}{5}+\frac{4}{5}$ $\frac{4}{5}$

c) $9\frac{3}{7}-5\frac{3}{7}+\frac{4}{7}+\frac{2}{7}$ $4\frac{6}{7}$

d) $\frac{1}{8}-2\frac{3}{8}+4\frac{5}{8}$ $2\frac{3}{8}$

3) Add/subtract the following fractions. (12)

a) $\frac{1}{24}-\frac{3}{18}$ $\frac{3}{72}-\frac{12}{72}=\frac{-9}{72}=\frac{-1}{8}$

b) $\frac{2}{6}-\frac{3}{16}$ $\frac{16-9}{48}=\frac{7}{48}$

c) $\frac{13}{28}-\frac{7}{12}$ $\frac{39-49}{84}=\frac{-10}{84}=\frac{-5}{42}$

d) $\frac{17}{39}-\frac{13}{26}$ $\frac{34-39}{78}=\frac{-5}{78}$

4) Write the decimal/fractional equivalence of the following. (6)

a) 1.8 $1\frac{4}{5}$

b) $\frac{2}{5}$ .4

c) .125 $\frac{1}{8}$

d) .5 $\frac{1}{2}$

5) Multiply the following fractions. (12)

a) $\frac{4}{15}*\frac{20}{18}$ $\frac{8}{27}$

b) $1\frac{1}{9}*3\frac{3}{5}$ $=4$

c) $\frac{4}{9}*\frac{12}{18}$ $\frac{8}{27}$

d) $3\frac{3}{7}*4\frac{3}{8}$ $=15$

7) Divide the following decimals. Show ALL your work!! (12)

a) $(+35.14)\div(+0.7)$ 50.2, $7\overline{)35.14}$, 35, 01, 0, 14, 14, 0

b) $-64.6\div 1.7$ -38, $17\overline{)646}$, 51, 136, 136, 0

c) $(20.15)\div(0.5)$ 40.3, $5\overline{)201.5}$, 20, 01, 0, 15

d) $78.68\div -.14$ -562, $14\overline{)7868}$, 70, 86, 84, 28

8) Multiply the following decimals. Show ALL your work!!

a) $(1.6)(-6.57)$

$657 \times 16 = 3942 + 6570 = -10.512$

b) $(-2.1)(4.56)$

$456 \times 21 = 456 + 9120 = -9.576$

(12)

c) $(-.29)(-.13)$

$29 \times 13 = 87 + 290 = .0377$

d) $(.85)(1.4)$

$85 \times 14 = 340 + 850 = 1.190$

9) Solve the following equations.

a) $\frac{x}{3.2} = -4.5$ ·3.2

$x = -14.4$

b) $x - 9.42 = 11.8$

$+9.42 \quad +9.42$

$x = 21.22$

(8)

c) $x + 0.89 = 14.2$

$-.89 \quad -.89$

$x = 13.31$

d) $\frac{1.1x}{1.1} = \frac{.55}{1.1}$

$x = .5$

10) Solve the following equations. Show ALL your work!

a) $x + 5 = 2$

$-5 \quad -5$

$x = -3$

b) $x - 8 = 20$

$+8 \quad +8$

$x = 28$

(8)

c) $\frac{5x}{5} = \frac{20}{5}$

$x = 4$

d) $\frac{x}{3} = 13 \cdot 3$

$x = 39$

11) Add/subtract the following decimals.

a) $2.59 + 10.123$

$10.123 + 2.590 = 12.713$

b) $0.046 - 6.564$

$-6.564 + .046 = -6.518$

(8)

c) $-7.56 + 8.42$

$+8.42 - 7.56 = .86$

d) $-3.78 - 6.49$

$-6.49 - 3.78 = -10.27$

12) Use > and < signs to compare the following.

a) $\frac{-4}{5} \boxed{<} \frac{-3}{4}$

b) $3\frac{5}{7} \boxed{<} 4\frac{6}{9}$

(4)

c) $1.\overline{56} \boxed{>} 1.56$

d) $3.51 \boxed{>} 3.15$

Name: Key
9/2/2016
7th Grade Quiz

1) Evaluate the expression: $(2+5)^2 - 4$

7

$49 - 4 = 45$

2) Simplify the following expression: $(2 + 4) * 5 + 6 * 8$

$6 \cdot 5 + 6 \cdot 8$

$30 \quad 48$

78

3) What is the order of operations? (Give the actual words, not just the abbreviation)

Parentheses
exponents
multiply/divide
add/subtract.

4) Simplify the following expression: $(6+5) * 8 \div 2$

11

$88 \div 2 = 44$

5) Simplify the following expression: $54 \div 6 + 4 * 5$

9 20

29

6) Simplify the following expression: $(1+2)^2 * (3-1)^2 \div 2$

$3^2 \cdot 2^2 \div 2$

$9 \cdot 4 \div 2$

18

Bonus: Who am I, who am I married to, what do I do, and where do I live?

nobody no one nothing no where

Name: key
9/8/2016
7th Grade Quiz

1) The Identity property of addition is shown by:

$$2 + 0 = 2$$

2) The distributive property is shown by:

$$a(b + c) = ab + ac$$

3) Use the following numbers to set up an equation to show the commutative property of addition: 1 & 3

$1+3=3+3$

4) Evaluate the expression: $(3+2)^2 - 6 * 3$

5
$25 - 18 = 7$

5) Simplify the following expression: $(2 + 8) \div 5 + 7 * 9$

$10 \div 5 + 63$

$2 + 63$

65

6) Simplify the following expression: $(6 + 5) * 8 \div 2$

11 $8 \div 2$

44

Name: Key
9/16/2016
7th Grade Quiz

1) Simplify the following expression: $(11 + 64 - 5^2) \div (5 - 2)$

$(75 - 25) \div 3$ 3

$50 \div 3$

16.67

2) a) Give an example of the identity property of multiplication. $2 \cdot 1 = 2$

b) Fill in the blank: $4 + \underline{-4} = 0$

c) The distributive property is shown by:

$$a(b + c) = ab + ac$$

3) Translate the following expressions into WORDS!

a) $4x + 3$ 4 times x plus 3

b) $2/x$ 2 divided by x

4) Translate the following words into EXPRESSIONS!

a) m plus the product of 4 and b. $m + 4 \cdot b$

*b) 2 times the sum of x and 9 $2 \cdot (x + 9)$

5) Use the following numbers to set up an equation to demonstrate the associative property of multiplication: 4, 5, 7

$(3 \cdot 5)7 = 3(5 \cdot 7)$

6) Evaluate the following expressions for $b = 5$.

a) $b^2 + 30$

25

55

b) $7 - b * 2$

5

-3

Name: Key.
9/30/2016
7th Grade Quiz

1) Simplify the following expressions:

a) $4x + 5x$ $9x$

b) $7x + 5x^2 - 3x$ $5x^2 + 4x$.

2) a) Give an example of the commutative property of addition. $2+3=3+2$.

b) Fill in the blank: $4 + \underline{0} = 4$

c) The Distributive property is shown by:

$$a(b + c) = ab + ac$$

3) Translate the following expressions into WORDS!

a) $\frac{4}{x} - 3$ 4 divided by x minus 3.

b) $2(x + 9)$ 2 times the sum of x and 9.

4) Find the absolute value of the each of the following:

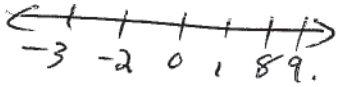
a) $|-16|$ 16

b) $|12|$ 12

c) $|0|$ 0

d) $4 + |-4|$ 8.

5) Put the following numbers in order on a number line: $1, -2, 0, 8, 9, -3$



6) Find the sum of the following:

a) $14 + (-7)$ 7

b) $-8 + (-5)$ -13

c) $19 + 5$ 24

d) $-14 + 7$ -7.

Name:_____
10/7/2016
7th Grade Quiz

1) Simplify the following expressions:

a) $4x + 5x$ 9x

b) $5x + 4y + 7y - 3x$ 2x + 11y.

2) a) Give an example of the commutative property of addition. 1+2 = 2+1

b) Fill in the blank: $4 + \_0\_ = 4$

c) The distributive property is shown by:

$$a(b + c) = ab + ac$$

3) ~~Translate the following expressions into WORDS!~~ Multiply

a) $5(-11)$ −55

b) $(-2)(-12)$ +24

~~c)~~ $16 - (-16)$

d) (5)5 25

4) Find the absolute value of the each of the following:

a) $|-16|$ 16

b) $|12|$ 12

c) $|0|$ 0

d) $4 + |-4|$ 8

5) Find the difference of the following expressions:

a) $5 - 11$ −6

b) $-2 + (-12)$ 16

c) $16 - (-16)$ 32

d) $-5 - 5$ −10

6) Find the sum of the following expressions:

a) $-21 + (-19)$ −40

b) $-128 + 101$ −27

c) $-19 + 11 + (-10)$ −18

d) $43 + (-14) + 20$ 49

Name: Key

10/14/2016

7th Grade Quiz

1) Simplify the following expressions:

a) $5x - 8y + 3x - 7y$ $8x - 15y$

b) $9x + 6y - 7y + 3x$ $12x - y$

2) Solve the following equations for the given variable. Be sure to show all your work!

a) $\frac{x}{-8} = 11$ $\cdot -8$ $\quad x = -88$

b) $x + 9 = 2$ $\quad -9 \quad -9$ $\quad x = -7$

3) Multiply the following expressions.

a) $7(-10)$ -70

b) $(-6)(-13)$ $+78$

c) $-2(16)$ -32

d) $(12)11$ 132

4) Solve the following equations for the given variable. Be sure to show all your work!

a) $x - 4 = 10$ $\quad +4 \quad +4$ $\quad x = 14$

b) $-7x = -21$ $\quad -7 \quad -7$ $\quad x = +3$

5) Find the difference of the following expressions:

a) $-5 - 11$ $= -16$

b) $2 + (+12)$ $= 14$

c) $16 - 16$ $= 0$

d) $-75 + (+5) = -70$

6) Find the sum of the following expressions:

a) $21 + (-19)$ 2

b) $134 + 205$ 339

c) $19 - 11 + (-10)$ $= -2$

d) $-43 + (-14) + 20$ -37

Name: Key
10/28/2016
7th Grade Quiz

1) Convert the following decimals to fractions. Write your answer in simplest form.

a) .20 $\frac{2}{10} = \frac{1}{5}$

b) .35 $\frac{35}{100} = \frac{7}{20}$

2) Write the following fractions as decimals.

a) 6/16 .375

16 | 60 (3) 48 (12) 120 112 80

b) 14/5 2.8

3) Use > and < signs to compare the following.

a) $\frac{4}{5} \boxed{>} \frac{3}{4}$

b) $-3\frac{5}{7} \boxed{>} -4\frac{6}{9}$

c) $1.\overline{56} \boxed{>} 1.56$

d) $4.05 \boxed{<} 4.50$

4) Solve the following equations. Show ALL your work!

a) $x - 5 = 2$
$+5 \quad +5$
$x = 7$

b) $x + 8 = 20$
$-8 \quad -8$
$x = 12$

c) $\frac{4x}{4} = \frac{24}{4}$
$x = 6$

d) $\frac{x}{3} = -18$ ·3
$x = -54$

5) Find the difference of the following expressions:

a) $-8 - (+11)$ 3

b) $20 - 18$ 2

c) $-16 - 16$ -32

d) $75 - 90$ -15

Name: Key
11/4/2016
7th Grade Quiz

NO CALCULATOR!!

1) Convert the following decimals to fractions. Write your answer in simplest form.

a) .12 $\frac{12}{100} \rightarrow \frac{3}{25}$

b) $.\overline{2}$ $\frac{2}{9}$

2) Add the following decimal numbers. Show all your work!

a) $4.15 - 9.054$ -4.904

9.054
4.150
4.904

b) $-7.23 + 6.8$ $-.43$

6 1
-7.23
+6.80
-.43

3) Multiply the following decimal numbers. Show all your work!

a) $-9.6 * 2.05$ -19.680

205
96
1230
18450

b) $0.07 * 0.03$ $.0021$

7
3
.0021

4) Solve the following equations. Show ALL your work!

a) $\frac{5x}{5} = \frac{20}{5}$

$x = 4$

b) $\frac{x}{3} = 13 \cdot 3$

$x = 39$

5) Fill in the blanks for the rules of adding, subtracting, and multiplying decimals.

a) Adding/subtracting: you need to line up the decimal points.

b) Multiplying: You need to Count the number of digits behind the decimals. This is the number of digits behind the decimal point in your answer.

Name: Key
11/10/2016
7th Grade Quiz

NO CALCULATOR!!

1) Convert the following decimals to fractions. Write your answer in simplest form.

a) 1.8 $1\frac{4}{5}$

b) $.\overline{3}$ $\frac{1}{3}$

2) Add/subtract the following decimal numbers. Show all your work!

a) $-3.56 - 9.054$ -12.614

b) $7.12 + 5.83$ 12.95

3) Divide the following decimal numbers. Show all your work!

a) $4.05 \div .15$ 27

b) $11.52 \div 1.6$ 7.2

4) Solve the following equations.

a) $x - 4.5 = 10.8$ $x = 15.3$

b) $.9x = .45$ $x = .5$

5) Fill in the blanks for the rules of adding, subtracting, and multiplying decimals.

a) Adding/subtracting: you need to line up the decimal points.

b) Multiplying: You need to count the number of digits behind the decimals. This is the number of digits behind the decimal point in your answer.

c) Dividing: You move the decimal point on the divisor. to the end. Then, you move the decimal point on the dividend the same number of times.

6) Solve the following algebra problems.

a) $x + 3.5 = -8.4$ $x = -11.9$

b) $\frac{x}{1.2} = 0.5 \cdot 1.2$ $x = .6$

Name: Key
11/18/2016
7th Grade Quiz

1) Add/subtract the following fractions. Show all your work!!

a) $\frac{1}{6}+\frac{5}{6} = \frac{6}{6} = 1$

b) $\frac{3}{7}-\frac{4}{7}$ $\frac{-1}{7}$

2) Add/subtract the following fractions. Show all your work!!

a) $\frac{5}{8}-\frac{1}{12}$ (3·8, 12·2) $= \frac{15}{24}-\frac{2}{24} = \frac{13}{24}$

b) $\frac{3}{4}+\frac{8}{15}$ (15·4, 15·4) $\frac{45}{60}+\frac{32}{60}=\frac{77}{60}$ $1\frac{17}{60}$

3) Multiply the following fractions.

a) $\frac{7}{12}*\frac{-6}{14}$ (12·2, 14·2) $\frac{-1}{4}$

b) $\frac{8}{15}*\frac{9}{16}$ (15·5, 16·2) $=\frac{3}{10}$

4) Multiply the following fractions.

a) $3\frac{3}{5}*\frac{1}{4}$ $\frac{18}{5}\cdot\frac{1}{4_2} = \frac{9}{10}$

b) $\frac{5}{1}*\frac{1}{3} = \frac{5}{3}$ $1\frac{2}{3}$

5) Fill in the blanks for adding/subtracting fractions.

Adding/Subtracting:

1) Get everything in fraction. form.
2) Find a common denominator using the LCM.
   -Multiply the top and bottom by what is missing.
3) Add/subtract the numerators as normal and keep the denominator.
4) Simplify the fraction.

6) Write the decimal/fractional equivalence of the following.

a) $\frac{1}{4}$ .25

b) $\frac{2}{3}$ $.\overline{6}$

c) .625 $\frac{5}{8}$

d) .75 $\frac{3}{4}$

Name: Key
12/2/2016
7th Grade Quiz

1) Multiply the following fractions.

a) $\frac{2}{3} * \frac{6}{9} = \frac{4}{9}$

b) $\frac{6}{7} * \frac{21}{22} = \frac{9}{11}$

2) Divide the following fractions.

a) $\frac{2}{3} \div \frac{6}{9} = 1$

b) $\frac{6}{7} \div \frac{24}{21} = \frac{3}{4}$

3) Divide the following fractions.

a) $1\frac{2}{3} \div 4\frac{3}{8} \quad \frac{5}{3} \div \frac{35}{8} = \frac{5}{3} \cdot \frac{8}{35} = \frac{8}{21}$

b) $3 \div \frac{9}{10} = \frac{3}{1} \cdot \frac{10}{9} = \frac{10}{3} = 3\frac{1}{3}$

4) Solve for x in the following equations. Show all your work!

a) $\frac{5}{8}x = \frac{2}{5} \div \frac{5}{8} \quad \frac{2}{5} \cdot \frac{8}{5} = \frac{16}{25}$

b) $x - \frac{1}{5} = \frac{3}{5}$ $+\frac{1}{5}$ $+\frac{1}{5}$ $\quad x = \frac{4}{5}$

5) Solve for x in the following equations. Show all your work!

a) $x + \frac{5}{8} = \frac{11}{16}$ $-\frac{5}{8}$ $-\frac{5}{8}$ $\quad x = \frac{11}{16} - \frac{10}{16} = \frac{1}{16}$

b) $6\frac{8}{21}x = 13\frac{1}{3} \quad \div 6\frac{8}{21} \quad 6\frac{8}{21}$ $= \frac{20}{3} \cdot \frac{21}{134} = \frac{140}{67} = 2\frac{6}{67}$

6) Fill in the blanks for dividing fractions.

Dividing Fractions:

1) Get everything in fraction form.

1b) Reciprocate the fraction after the division sign and change the division sign to multiplication.

2) Cross cancel things that are on both top and bottom.

3) Multiply the tops and the bottoms.

*Write answer as a mixed number if you have to.