Name:_____

Hour:_____

TRIMESTER ONE FINAL EXAM REVIEW

Final exams are quickly becoming a regular expectation for you. In order to help you prepare for this, we will be taking a "final" exam each trimester. On _____, 2016, you will take the Pre-Algebra Trimester One Final Exam. This exam will assess the content we covered in the first trimester.

You have already seen the final exam. You took it the first week of school. This provides you the opportunity to look at your growth and see your areas of strength and those that still may need some improving.

This review packet is a great resource as well as your note packets and unit assessments. We will go over the problems from this packet prior to the exam. It is a great idea to do a little bit of the packet at a time. Try not to procrastinate – cramming all this information in right before the exam is not a good studying technique!

This final will be included in your grade as one assessment grade. It is imperative that you learn how to prepare for final exams and what to expect when it comes to taking these types of summative assessments.

KEEP CALM AND STUDY FOR EXAMS

CONTENT COVERED in the FIRST TRIMESTER:

Unit 1: Back to the Basics

- Decimals
  - Rounding
  - Adding
  - Subtracting
  - Multiplying
  - Dividing
- Number Properties
  - Commutative
  - Associative
  - Distributive
  - Identity
- Order of Operations

Unit 2: Integers

- Absolute Value & Opposites
- Integers
  - Adding
  - Subtracting
  - Multiplying
  - Dividing
- Exponents & Square Roots
- Order of Operations

Unit 3: Rational Numbers

- Prime & Composite Numbers
- Greatest Common Factor (GCF)
- Least Common Multiple (LCM)
- Fraction to Decimal
- Decimal to Fraction
- Fractions
  - Adding
  - Subtracting
  - Multiplying
  - Dividing

Unit 4: Variable Expressions

- Evaluate Variable Expressions
- Identify Parts of an Expression
- Combine Like Terms
- Distributive Property
- Simplify Variable Expressions

Unit One: Back to the Basics

Round to the nearest whole number:

1. 41.803
2. 119.63
3. 20.05
4. 3.45

Round to the nearest tenth:

1. 33.335
2. 1.861
3. 99.96
4. 103.103

Round to the nearest hundredth:

1. 69.713
2. 5.569
3. 609.906
4. 247.898

Add, Subtract, Multiply, or Divide the Decimals:

1. $12.16 - 8.72 =$
2. $119.7 + 11.97 =$
3. $3.4(8) =$
4. $2960 \div 0.37 =$
5. $329.82 + 6.129 =$
6. $893.631 - 11.09 =$
7. $132.03 \div 8.1 =$
8. $(16.1)(3.66) =$

Write the Number Property that is illustrated by the given equation:

1. $6 * 9 = 9 * 6$
2. $7 + 15 = 15 + 7$
3. $69 + (31 + 23) = (69 + 31) + 23$
4. $20 * (5 * 17) = (20 * 5) * 17$
5. $x + 2.5 = 2.5 + x$
6. $3(n * 8) = 3(8n)$
7. $3(8n) = (3 * 8)n$
8. $11 + (w + 2) = (11 + 2) + w$
9. $a + 0 = a$
10. $5 * 1 = 5$

Unit Two: Integers

Use the chart to classify the numbers below:

	Real	Rational	Irrational	Integer	Whole	Counting
-5						
3.54786763…						
-2.5						
0						
345						
$\frac{8}{9}$						
74.4444444…						
$\sqrt{64}$						
-32.0						
16.5479475…						

Opposites and Absolute Value:

1. $|-12| =$
2. $-\left|5\frac{1}{2}\right| =$
3. $|-5| + |9| =$
4. $7 + |-3| =$
5. $|7| + |-7| =$
6. $-(-3+4) =$
7. $-(9-9) =$
8. $|9| - |-12| =$
9. $|-3| + |9| - 6 =$
10. $-3|5| - |5| =$

Add, Subtract, Multiply, or Divide the Integers:

1. -3 + (-5) = _____
2. 6 + 4 = _____
3. 8 + (-2) = _____
4. 7 + (-7) = _____
5. -3 + 5 = _____
6. -4 + 9 = _____
7. 6 + (-13) = _____
8. -5 + 5 = _____
9. -6 + (-6) = _____
10. 4 + 2 = _____
11. 6 – 8 = _____
12. -4 – 8 = _____
13. 5 -9 = _____
14. 8 – 5 = _____
15. -3 – 6 = _____
16. -8 – 8 = _____
17. 5 – (-9) = _____
18. -6 – (-4) = _____
19. 2 – (-9) = _____
20. -1 – 6 = _____
21. -8 * 2 = _____
22. 5 * -6 = _____
23. -3 * -7 = _____
24. -8 * (-1) = _____
25. 5 * 0 = _____
26. -7 * 0 = _____
27. -4 * (-4) = _____
28. 0 * 8 = _____
29. -1 * 9 = _____
30. -11 * 3 = _____
31. 24 ÷ -4 = _____
32. 16 ÷ (-8) = _____
33. 10 ÷ (-2) = _____
34. -15 ÷ 3 = _____
35. -9 ÷ (-3) = _____
36. 0 ÷ -3 = _____
37. -1 ÷ (-1) = _____
38. 8 ÷ (-4) = _____
39. -2 ÷ (-2) = _____
40. -5 ÷ 1 = _____
41. -5 + (-3) = _____
42. -8 * 5 = _____
43. -6 – 4 = _____
44. (10)(-2) = _____
45. 5 – 14 = _____
46. -7 * (-7) = _____
47. -8 + 8 = _____
48. -18 ÷ (-9) = _____
49. 0 * (-3) = _____
50. 4 + (-14) = _____
51. -5 – (-15) = _____
52. 14 – 6 = _____
53. -3 – 3 = _____
54. -5 + (-5) = _____
55. -36 ÷ (-6) = _____
56. 25 ÷ (-5) = _____
57. -2 * (-5) = _____
58. -6 + (-3) = _____
59. 0 + 0 = _____
60. $|-6|$ = _____

Use the Exponent Rules for Multiplication and Division to simplify:

1. $x^{10} * x^{11}$
2. $g^8 * g^9$
3. $h^7 * h^2 * h^8$
4. $\frac{k^{16}}{k^8}$
5. $8f^9 * 7f^{10}$
6. $\frac{y^{20}}{y^{14}}$
7. $\frac{m^{19}}{m^{15}}$
8. $d^4 * d^5$
9. $\frac{x^{15}}{x^9}$
10. $\frac{15x^{11}}{18x^7}$

Use Order of Operations to solve:

1. $-9 \div -3 + 4 * -\frac{1}{4} - 20 \div 5 =$
2. $\left(8\frac{1}{3} + 3\frac{2}{3}\right) \div 4 - (-16) =$
3. $\frac{\left(80 * \frac{1}{2}\right)+35}{-10+25} =$
4. $2(-6(3 - 12) - 17) =$
5. $3 * 2[4 + (9 \div 3)] =$
6. $50 \div [(4 * 5) - (36 \div 2) + -9] =$

Unit Three: Rational Numbers

Write all the factors of the number. State whether the number is prime or composite:

1. 28
2. 44
3. 46
4. 97
5. 127

Write the prime factorization for each number:

1. 248
2. 360

Find the Greatest Common Factor:

1. 28 and 60
2. 28 and 70
3. 48 and 80
4. 66 and 71

Find the Least Common Multiple:

1. 24 and 28
2. 20 and 36
3. 42 and 63
4. 5 and 10

Change the Fraction to a Decimal:

1. $\frac{3}{5}$
2. $\frac{11}{25}$
3. $\frac{7}{15}$
4. $2\frac{1}{9}$
5. $\frac{23}{33}$
6. $1\frac{5}{16}$
7. $\frac{12}{25}$
8. $\frac{2}{9}$

Change the Decimal to a Fraction:

1. 0.125
2. $0.\overline{6}$
3. 0.36
4. $0.\overline{46}$
5. 0.6875
6. 0.55

Add, Subtract, Multiply and Divide Fractions:

1. $8\frac{1}{15} - 5\frac{11}{20}$
2. $3\frac{1}{9} + -8\frac{3}{7} + 1\frac{1}{3}$
3. $1\frac{7}{8} * 3\frac{3}{5}$
4. $-4\frac{4}{5} \div 2\frac{8}{10}$
5. $7 - \left(3\frac{7}{9} \div 4\frac{2}{3}\right)$
6. $4\frac{2}{3} * -1\frac{3}{4} * 3\frac{3}{4}$
7. $12\frac{1}{2} - (-7\frac{15}{16})$

Unit Four: Variable Expressions

Write the written expression as a variable expression:

1. The sum of 6 and a number.
2. The difference of a number and 15.
3. The product of a number and 5.
4. 3 times the quantity of the sum of a number and -2.
5. 15 less than some number.
6. The quotient of a number and 12.

Identify the parts of the expression:

$$18ab + -6a + -7b + 26ab + -7b$$

1. Number of Terms:
2. Coefficients:
3. Like Terms:
4. Constant Terms:

Evaluate the variable expression when $a = \frac{1}{2}, x = 4 \text{ and } y = -2$

1. $4(a - 1) =$
2. $4a - 3y =$
3. $4(x - 3y) =$
4. $x(a + 6) =$
5. $3x + 2(a - y) =$
6. $10x(8a + -4y) + (-3y)$

Use the distributive property to simplify the expression:

1. $-7(a+b)$
2. $3(2x-8)$
3. $7(-5x-8)$
4. $-(3x+8y—7)$
5. $-2(m-4)$

Simplify the expression by combining like terms:

1. $4a+7+3a-8-3a$
2. $4a+8b+11a-10b$
3. $6c-8ab+9c-10$
4. $5x-3x+2xy+31x-(-18xy)$
5. $3x(5-x)+\ 4x-(-5x)+\ 3-x+4$
6. $4(x-6)-(2x+5)-\ 3x$