Name _____ Date _____ Pd __

CYU 1.1 – 1.4 Quiz Review

☑ *Use when you get it right all by yourself*

S Use when you did it all by yourself, but made a silly mistake

H Use when you could do it alone with a little help from teacher or peer

G Use when you completed the problem in a group

X Use when a question was attempted but wrong (get help)

N Use when a question was not even attempted

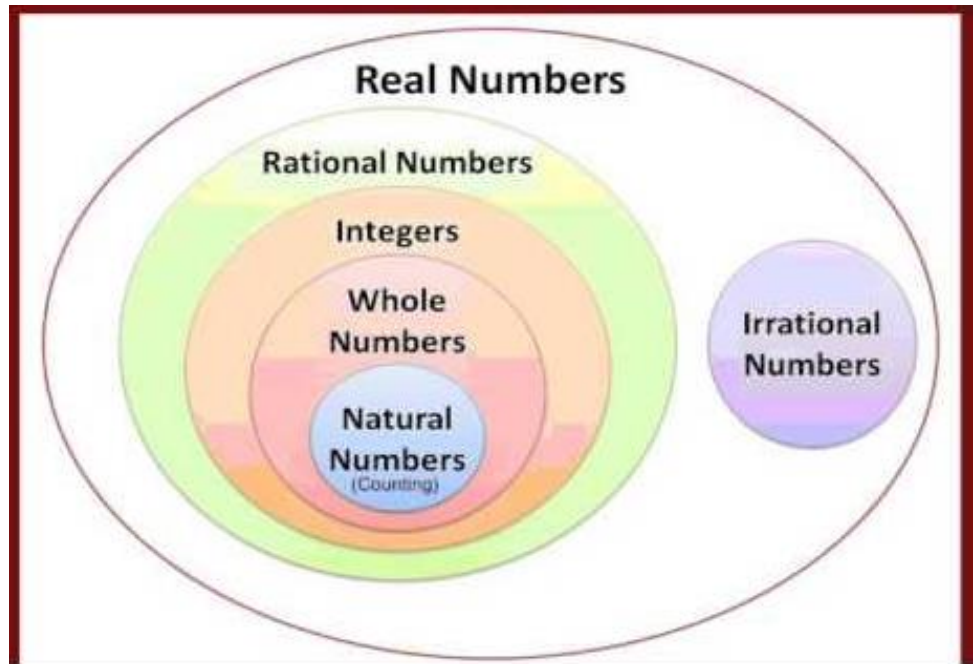| CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Inequalities		14 - 18	39 - 45
Translating words into mathematical sentences		19 - 36	37 - 38
Integers	13	14 - 18	
Absolute Value, Opposite Number, + - #	1 – 8	9 - 12	39 - 45
Natural & Whole Numbers	13		
Real numbers	13		
Rational & Irrational Numbers	13		
Simplest Form/Lowest Terms	46 - 54		
Multiply Fractions/Divide Fractions		49 - 52	
Adding Fractions/Subtracting Fractions		46 - 48	53 - 54
LCD		46 - 48	53 - 54
Mixed Numbers/Improper Fractions			53 - 54
Evaluating exponent notation		55 – 60	
Order of Operations: PEMDAS		55 - 60	
Operation Symbols: +, -, ∙, ÷	55 - 60		
Evaluating Expressions		61 - 66	
Solution/Answer			37 - 38

Answer the following with positive, negative, or 0.

1) The opposite of a positive number is a _____ number.
2) The sum of two negative numbers is a _____ number.
3) The absolute value of a negative number is a _____ number.
4) The absolute value of zero is _____.
5) The reciprocal of a positive number is a _____ number.
6) The sum of a number and its opposite is _____.
7) The absolute value of a positive number is a _____ number.
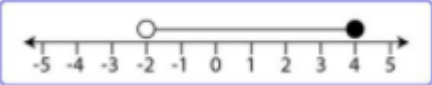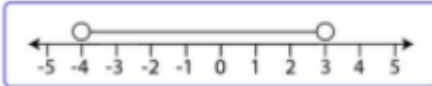8) The opposite of a negative number is a _____ number.

Fill in the chart.

Problem	Number	Opposite	Absolute Value
9)	$\dfrac{1}{7}$		
10)	$-\dfrac{12}{5}$		
11)		-3	
12)		$\dfrac{9}{11}$	

13. Know the definitions of each type of number category. Then place the bank of numbers into the best most specific location.

$\pi \quad \dfrac{1}{4} \quad \sqrt{9} \quad 0$

$-2 \quad 3.57 \quad -5 \quad 0.999....$

$3 \quad \sqrt{5} \quad 1.24519764...$

$\dfrac{1}{3} \quad -19 \quad e \quad -7$

$N \quad W \quad Z \quad Q \quad I$

Fill in the chart below.

Problem	Inequality	Number Line	Integers Included
14)	**-4 < x ≤ -1**		
15)			
16)			**-4, -3, -2, -1, 0, 1, 2, 3, 4, 5**
17)	**0 ≤ x < 3**		
18)			

Translating Sentences, Expressions, & Statements.

19) The sum of six and nine is fifteen.

20) The quotient of three and seven

21) The sum of two and eight gives ten.

22) The product of eight and seven is fifty-six.

23) Ten less than p

24) The product of three and eight is twenty-four.

25) Twice the difference of x and three gives eighteen.

26) The sum of six and five

27) Eight times the difference of p and five gives twenty-nine.

28) Six times the difference of b and g

29) Nine times the sum of d and three gives twenty-five.

30) Three more than x is equal to forty-seven.

31) The difference of ten times b and g

32) Four more than x is equal to twelve.

33) The difference of y and fourteen is eighteen.

34) Eleven less than x is equal to thirty.

35) The quotient of three and the product of ten and x

36) Two subtracted from six

37) Let w represent the width of the rectangle and write an expression for the length of the rectangle if the length of a rectangle is 9 inches less than the width.

38) Salvador has dimes and quarters in his pocket. The number of dimes is nine less than thirteen times the number of quarters. Let q represent the number of quarters, and write an expression for the number of dimes.

Absolute Value: Simplify the first four and fill in the last three with the correct inequality symbol.

39) $|(-3)(6)|$ 　　　　　40) $-|5-2|$ 　　　　　41) $-2|2-5|$ 　　　　　42) $-|-12|$

43) $|-3|\underline{\quad}|-5|$ 　　　　44) $|2-7|\underline{\quad}|5(-3)|$ 　　　　45) $-|5-9|\underline{\quad}|-6|\div|-2|$

Fractions: Perform the indicated operation in proper order and write your final answer in simplest form. Show all your work to earn full credit.

46) $5\frac{1}{3} - 7\frac{6}{7} + 3\frac{7}{8}$ 　　　　　　47) $13\frac{1}{4} - 3\frac{3}{8} - 4\frac{2}{10}$ 　　　　　　48) $8\frac{2}{6} - 3\frac{3}{5} - 2\frac{1}{12}$

49) $1\frac{3}{4} \div \frac{3}{8}$ 　　　　　　50) $6\frac{2}{5} \cdot \frac{7}{30}$ 　　　　　　51) $\frac{1}{5} \cdot \frac{5}{12}$

52) $6\frac{3}{14} \div \frac{1}{7}$ 　　　　　　53) $7\frac{5}{4} + 6\frac{1}{8}$ 　　　　　　54) $4\frac{3}{10} - 2\frac{3}{4}$

Exponents & Order of Operations

55) $(52 - 2) \div 2 + 6^2$

56) $(5 \cdot 2 + 9^2) + 9$

57) $(37 - 3^2) \div (20 - 6)$

58) $\{(3)(2) + 5^2\} - 9$

59) $(73 - 5^2) \div (31 - 7)$

60) $(6 + 4)^2 + (20 \div 5)$

Evaluate the Expressions

61) If r = 27 and d = 2: $3 - \frac{r}{9} - 8d$

62) If f = 2 and w = 4: 8f – 7 + 2w

63) -8 – 9z + 4 + 3n if z = 2 and n = 4

64) d + 2n if d = 4 and n = 5

65) -4(9b + 5w) if w = 5 and b = 9

66) -3h – 8(9s – 2) if s = 4 and h = 5

CYU Reflection: *How far can you go: basic, intermediate, or advanced?*

Rate your mastery level!
How confident are you with the skills this CYU covered? Circle the score you would give yourself.

| 1 2 | 3 4 5 | 6 7 | 8 |
| Basic | Intermediate | Advanced | Solved ALL! |