Algebra 1 Unit 2: Practice Test Name: ______ Period: ______

"PRACTICE" TEST... Unit 2 – Equations and Inequalities

Part 1: Solve the equations, if possible. No decimal answers unless decimals are given.

1)	$\frac{2}{3}(x+4) = 8$
2)	4(-5+x) = 4x - 20
3)	-4y-3=6y+2
4)	5(y+2) = 5y-2
Dart 2. Calua tha inaguality N	o docimal answers unless desimals are siven
<u>Part 2</u> : solve the inequality. No	5 < 2 - x
/	
6)	$-6k+15 \le -21$
Dout 2. Colucy the commound in	
<u>Part 3</u> : Solve the compound inc 7)	$-4 \le -3y - 1 \le 5$
8)	$10x - 4 \le -24$ or $5x + 3 > 18$
0)	6 a < 1 or 3a < 12
5)	$0 \ u < 1 \ 07 \ 5u \le 12$
Part 4. Calve the sheelute value	e equation or incruality. No desimple unless desimple are siven
<u>Part 4</u> : Solve the absolute value	r+2,7 < 5
10/	
11)	3a+5 -4=22
12)	7p-5 > 9

Part 5: Graph each solution set on the provided number line.

◀	1 3)	-2 < b	$p \leq 3$			
•	→ 14)	n < -5	for $n > 3$			
Part 6: Solve the applicatio	n problem. Write your final a	nswer on the p	provided line. Do	n't forget units.		
15)	Jill sold half of her comic books and then bought sixteen more. She now has 36. How many comic books did Jill start with?					
	Define the variable:					
	Equation:					
16)	The length of a rectangle is 6 inches more than its width. The perimeter of the rectangle is 24 inches What is the length of the rectangle?					
	Define the variable:					
	Equation:					
Part 7: Applications Mult	iple-Choice.					
17)	Mrs. Smith wrote "eight board. If <i>n</i> represents the statement?	is greater than 15" on the correct translation of this				
	A) 3n-8>15 B) 3	n-8<15	C) $8 - 3n > 15$	D) 8-3 <i>n</i> <15		
18)	Which value of x is in the solution set of the inequality $-4x+2>10$?					
	A) -2	B) 2	C) 3	D) -4		
19)	Students in a 9 th grade math class measured their heights, <i>h</i> , in centimeters. The height of the shortest student was 155 cm and the height of the tallest student was 190 cm. Which inequality represents the range of heights?					
	A) 155< <i>h</i> <19	0	в) 155	$\leq h \leq 190$		
	C) 155> <i>h</i> >19	0	D) 155	$\geq h \geq 190$		
20a)	Peter begins his kindergarten year able to spell 10 words. He is going to learn to spell 2 new words every day.					
20b)	A) Write an <u>inequality</u> to determine how many days, d, it takes Peter to be able to spell at least 75 words.					
	B) Use this ineq it will take fo	B) Use this inequality to determine the minimum number of whole days it will take for him to be able to spell <i>at least</i> 75 words.				