

Name: key Period: _____ Date: _____

Algebra I
Unit 1 Assessment
Review Sheet

* Due Friday *
BONUS +5
on test.
→ MUST SHOW WORK

Simplify.

1. $5x + 3(2x - 1) - 4$

$11x - 7$

2. $11 - (2y - 3) + 4y$

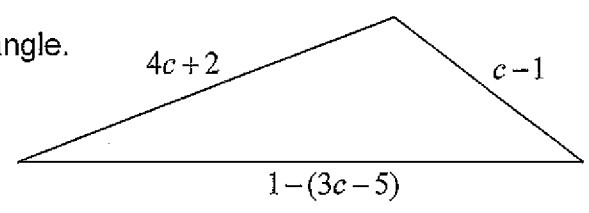
$14 + 2y$

3. $2 + 7a - 5 - a$

$-3 + 6a$

4. Find the perimeter of the triangle.

$2c + 7$



Solve.

5. $-3(2x + 1) = -4x + 5$

$x = -4$

6. $\frac{1}{2}t - 1 = \frac{4}{5}(5t - 5)$

$t = \frac{6}{7}$

7. $5 - (3f - 4) = 2(6 - f)$

$f = -3$

8. Identify the last step in solving the following equation: $5x + 10 = -30$

a. divide both sides by 5

b. add 10 to both sides

c. multiply both sides by 5

d. subtract 10 from both sides

9. Solve for r.

$$C = 2\pi r$$

$$\frac{C}{2\pi} = r$$

10. Solve for h.

$$A = \frac{1}{2}bh$$

$$\frac{2A}{b} = h$$

11. Solve for w.

$$P = 2l + 2w$$

$$\frac{P}{2} - l = w$$

12. Solve for y.

$$-10x + 5y = -15$$

$$y = 2x - 3$$

13. What does "no solution" mean when solving an equation?

NO value of x will work to make the equation solvable

14. What does "infinitely many solutions" mean when solving an equation?

ANY value of x will work to make the equation solvable

15. If $x > 3$, which of the following would be part of the solution set for x?

circle all the values that make $x > 3$ true

a. 0

b. 3

c. 2.9

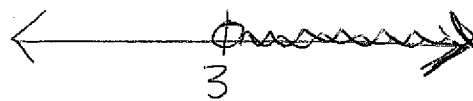
(d.) 3.00001

e. -4

(f.) 12

16. Solve the follow inequality:

$$3x - 8 > -4x + 13$$

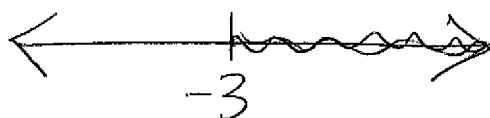


$$x > 3$$

17. Solve the following inequality:

$$-2x - 9 < 4x + 9$$

$$x > -3$$



18. What is the difference between $f(x) = 3$ and $f(3)$?

$f(x) = 3$: this tells me that $y = 3$

$f(3) =$: this tells me that $x = 3$

19. use the following equation, $f(x) = 3x - 5$, to solve the problems below:

a. $f(x) = -2$

~~0~~ $x = 1$

b. $f(-2)$

$f(-2) = -11$

c. $f(0)$

$f(0) = -5$

d. $f(x) = 0$

$$\begin{array}{r} 0 = 3x - 5 \\ +5 \quad +5 \\ 5 = 3x \end{array}$$

$$\frac{3x}{3} = \frac{5}{3}$$

$x = \frac{5}{3}$

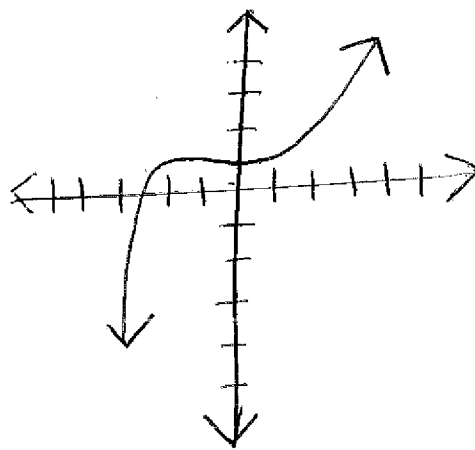
20. How do you determine if each of the following is a FUNCTION or not

TABLE: No repeating x values it is a function
 MAPPING: X does not go to more than 1 y value (is a function)
 SET OF ORDERED PAIRS: No repeating x values it is a function
 EQUATION:
 GRAPH: passes vertical line test it is a function

- Make an example of a TABLE that is NOT a function

x	1	2	2	3
y	4	5	6	7

- Draw an example of a GRAPH that is a FUNCTION



- Write an example of a SET OF ORDERED PAIRS that is NOT a function

$(3, -4)$ $(1, 2)$ $(3, 4)$ $(1, -1)$

- Make an example of a MAPPING that is a FUNCTION

