

Solve for the stated variable. State restrictions on the variables.

1. Solve for T . $\frac{C+AT}{M} - 7 = W$

2. Solve for K . $E(K+5R) = \frac{C}{N}$

3. Solve for R . $RW + CR = MK$

4. Solve for Q . $\frac{7+C}{Q} - E = X$

Solve each inequality.

5. $4x - 7(x+2) < 16$

6. $6k - 9 + 2k \geq 8k + 7$

7. a. $4(y-6) + y \leq 3(2y+5) - y$

b. $7 + 9a - 2(a+5) - a > 6a + 3$

Solve each compound inequality. State the answer as a single inequality, if possible. Write All Real Numbers or No Solution if applicable.

8. $2R - 1 < -11$ AND $R \geq 6$

9. $3E + 9 > -3$ OR $-2E + 1 > 5$

10. $7W < 14$ AND $W > -3$

11. $A < 12$ OR $A - 6 < -3$

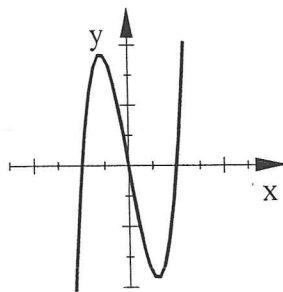
12. $K \geq 7$ AND $-3K \leq 12$

13. $2E - 1 \geq 13$ OR $E \leq 1$

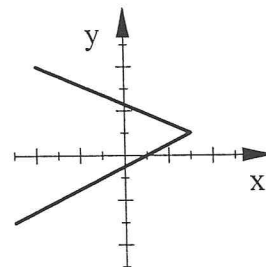
For 14 to 17, tell if each relation a function? 14. $(-9, 8), (4, 7), (1, -5), (-9, 3)$

X	Y
3	7
-4	-1
2	5
8	-1

15.

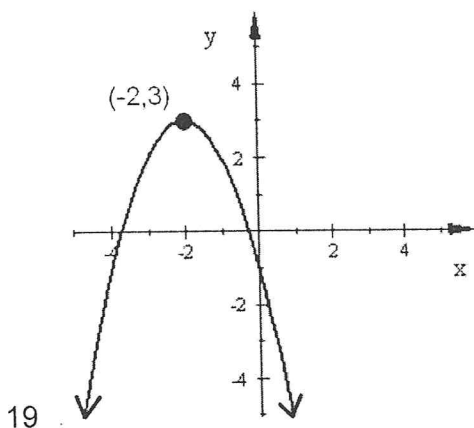


16.



17.

For 18 and 19, state the domain and range of each relation: 18 $(2, 11), (4, 8), (2, 3), (-5, 8)$



19

20. Given $f(x) = 5x^2 - x$ Find $f(-3)$

21. Given $h(a) = 4a - 7$ Find a if $h(a) = 13$

Solve each Absolute Value Equation or Inequality.

22. $|2x - 5| - 1 = 32$

23. $|5x + 3| > 11$

24. $|4x - 9| \leq 41$

Algebra 2 Quiz #1 Review

Sec 1-3 to 1-5, 2-1

ANSWERS

$$1. T = \frac{M(W+7)-C}{A} \quad A, M \neq 0 \quad 2. K = \frac{C}{NE} - 5R \quad \text{or} \quad K = \frac{\frac{C}{N} - 5ER}{E} \quad N, E \neq 0$$

$$3. R = \frac{MK}{W+C} \quad W+C \neq 0 \quad 4. \frac{7+C}{X+E} \quad X+E \neq 0, Q \neq 0$$

$$5. x > -10 \quad 6. \text{No Sol} \quad 7. \text{a. All Real Numbers} \quad \text{b. No Solution}$$

$$8. \text{No Sol} \quad 9. \text{All Real Numbers} \quad 10. -3 < w < 2 \quad 11. A < 12 \quad 12. K \geq 7$$

$$13. E \leq 1 \quad \text{or} \quad E \geq 7 \quad 14. \text{No, it's not a function} \quad 15. \text{Yes, it is a function}$$

$$16. \text{Yes it is a function} \quad 17. \text{No, it's not a function}$$

$$18. \text{Domain : } \{-5, 2, 4\} \quad \text{Range : } \{3, 8, 11\} \quad 19. \text{Domain : All Real Numbers} \quad \text{Range : } y \leq 3$$

$$20. f(-3) = 48 \quad 21. a = 5 \quad 22. x = -14, 19 \quad 22. x < -2.8 \text{ or } x > 1.6$$

$$23. -8 \leq x \leq 12.5$$