Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3rd Quarter Review

Algebra 1B

Determine whether the relation is a function. If the relation is a function, determine whether the function is linear or nonlinear. (2 points each)

1.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| x | 2 | 5 | 7 | 9 |
| y | 5 | 11 | 19 | 12 |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.$x=-2$

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Graph the equation and identify the intercepts. Find the slope. (5 points)

3. $y=5$

 

*x*-intercept: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*y*-intercept: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

slope: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Evaluate. (3 points)

4. $g\left(x\right)=4-3x$ when *x* = -3, 0, and 5.

Find the value of *x* so that the function has the given value. (1 point)

5. $r\left(x\right)=-5x-1;r\left(x\right)=19$

Graph the Linear Equations. (2 points each)

6. $-12x-3y=36$



7. $x=6$



Graph the function. Compare the graph to the graph of $f\left(x\right)=$|x|. Describe the Domain and Range. (5 points each)

8. $q\left(x\right)=4|x|$



9. $r\left(x\right)=-\frac{1}{4}|x|$



Solve the inequality. Graph (number line) if possible. (3 points)

10. $-4s<6s+1$