**GSE Algebra 1 3.5 - Unit 3 Practice sheet Name: \_\_\_\_\_\_\_\_\_\_\_\_\_**



 

Given the following equations, perform the operations that are required.

$f(x)=4x-1$ $g(x)=\frac{1}{2}x^{2}+4$ $h(x)=-3$ $j(x)=-3x+5$

4)

1. f(-1) + j(2) b. f(0) – h(0) c. j(x) = -4, what does x =\_\_\_\_\_\_\_\_\_\_

d. f(x) + j(x) e. j(x) – f(x) f. f(x) = 7, what does x = \_\_\_\_\_\_\_\_\_\_\_\_

g. f(x) = -5, what does x =\_\_\_\_\_\_\_\_\_\_ h. h(x)\*j(x)





7. How do you know if something is a function or not? Explain for the following examples.

 a. Table b. Scenario c. Mapping d. Graph

  

Susan puts exactly $5 a week into her piggy bank. She starts with $14 and wants to see how much she can save if she doesn’t ever spend it.

\*\*Be sure you EXPLAIN in WORDS!

8. Find the domain and range for the following. Be sure to watch the brackets and parentheses.

a.  b.  c. 

 Dom: Range: Dom: Range: Dom: Range:

 d. The distance a runner run per day versus the time spent running. e. 

 Dom: Range: Dom: Range:

9. Swine Flu is attacking Porkopolis. The function below determins how many people have swine flu where *t*=time in days and *S*=the number of people in thousands.

 S(t) = 9t – 4

1. Find S(4). b. What does S(4) mean?
2. Find t when S(t) = 23 mean. d. What does S(t) = 23 mean?

|  |  |  |  |
| --- | --- | --- | --- |
| Domain | Range | x-intercepts | y-intercepts |
| Increasing:  |   | Decreasing:  | Function?  |
| Constant:  | End Behavior$$x\rightarrow -\infty x\rightarrow \infty $$$$y\rightarrow y\rightarrow $$ |
| Maximums: Absolute Relative | Minimums: Absolute Relative |