Worksheet: Definitions in Function

1. Which of the following is a function? State your reason.
2. (b)



(c) (d)



1. Determine whether each of the following relations is a function or not? State your reason.
2. (b)

1

2

3

1

2

9

2

5

7

3

4

 (c) (d)

7

8

9

4

5

7

-1

2

6

9

3

5

8

1. For the function f(x)=3x-5, evaluate
2. f(2) (b) f(0)
3. If f(x)=2x+1, write down the following in their simplest form
4. f(x+1) (b) f(x)-x
5. A function is defined by f:x$\rightarrow 2x^{2}+1$ with domain X={-1,2,3}. Find the image set of f.
6. A function g is defined by g:x$\rightarrow 3+\frac{6}{x-1},x\ne 1$
7. Find the images of -1,1/2 and 5/4
8. Given that the image of a is 2a, find the possible values of a.
9. A function f is defined by f:$\rightarrow ax+b$. The images of 1 and 5 are -2 and 10 respectively.
10. Calculate the value of a and b
11. If the domain of f is X={1,3,5}, find the range of f.
12. A function is defined by $f\rightarrow ax^{2}+bx+c$. Given that f(1)=6, f(3)=32, f(-2)=-3. Find
13. The values of a, b and c
14. The positive number x whose image is 2
15. The set of numbers whose image under f is 2.