Section 3.4 – Relations and Functions

A relation is a _____.

The _____element in a relation is called the _____ and the

_____ element in called the _____.

State	Average Fine for 15 mph over speed limit

$A = \{$ $\}$

$B = \{$ $\}$

The domain of A is : A_D

The range of A is: A_R

The domain of B is : B_D

The range of B is: B_R

A _____ is _____

_____.

Determine whether the given relation is a function:

$I=\{(10,8),(6,4),(2,0),(-2,-4)\}$	$K=\{(3,4),(3,5),(8,9),(1,0)\}$
$J=\{(4,5),(6,8),(8,8)\}$	$P=\{(4,1),(5,3),(4,4)\}$

_____ is another way of writing _____. It _____

_____.

_____ y with _____ said _____. This gives us the

_____.

To find the value of a _____ at a given _____

we _____ the _____ into the equation and _____

or _____.

Find the values: $f(-3),\ f(0),\ f(2),\ f(x-1)$

$f(x)=3x+7$

$f(x) = -2x^2 + 1$

$f(x) = x^2 - 2x + 3$

$f(x) = \frac{3}{x-1}$

The difference quotient: _____

Find $\frac{f(x+h)-f(x)}{h}$

$f(x)=3x+7$
$f(x)=-3x^2-4$
$f(x)=-2x^2-x+1$