(3 points)

Name: Result:

1.

Let:

 $A = [-2, 3[\qquad B =]0, 4] \qquad C =]1, \infty[$

Find:

(a) $A \cap B$ (b) $B \cup C$

(c) C - A

2.

Solve the following inequality:

$$\frac{3+x}{2} - \frac{2x+1}{3} \ge 1$$

Represent the set of solution on the number line:

_4	_3	-2	-1	0	1	2	3	4	5	6	7	8

 $(2 \ points)$

3.

Solve the following inequalities:

(a)
$$2|x-2| - 3 < 5$$

(b) 11 - 2|2x + 3| < 1

Let the set of solutions to (a) and (b) be denoted by A and B respectively. Find:

- (i) $A \cap B$
- (ii) $A \cup B$
- (iii) A B

(5 points)