

## Homework #1 Solutions

### Exercise 9.2.1

**Solution:**

	Gen	Kill	IN	OUT
<b>B1</b>	(1),(2)	(8),(10),(11)		(1),(2)
<b>B2</b>	(3),(4)	(5),(6)	(1),(2),(3),(5),(8),(9)	(1),(2),(3),(4),(8),(9)
<b>B3</b>	(5)	(4),(6)	(1),(2),(3),(4),(6),(7),(8),(9)	(1),(2),(3),(5),(7),(8),(9)
<b>B4</b>	(6),(7)	(4),(5),(9)	(1),(2),(3),(5),(7),(8),(9)	(1),(2),(3),(6),(7),(8)
<b>B5</b>	(8),(9)	(2),(7),(11)	(1),(2),(3),(5),(7),(8),(9)	(1),(3),(5),(8),(9)
<b>B6</b>	(10),(11)	(1),(2),(8)	(1),(3),(5),(8),(9)	(3),(5),(9),(10),(11)

### Exercise 9.2.2

**Solution:**

Expressions:  $\langle 1 \rangle a+b$ ;  $\langle 2 \rangle c-a$ ;  $\langle 3 \rangle b+d$ ;  $\langle 4 \rangle e+1$ ;  $\langle 5 \rangle b*d$ ;  $\langle 6 \rangle a-d$

	Gen	Kill	IN	OUT
<b>B1</b>		$\langle 1 \rangle \langle 2 \rangle \langle 3 \rangle \langle 5 \rangle \langle 6 \rangle$		
<b>B2</b>	$\langle 1 \rangle \langle 2 \rangle$	$\langle 3 \rangle \langle 5 \rangle \langle 6 \rangle$		$\langle 1 \rangle \langle 2 \rangle$
<b>B3</b>		$\langle 3 \rangle \langle 5 \rangle \langle 6 \rangle$	$\langle 1 \rangle \langle 2 \rangle$	$\langle 1 \rangle \langle 2 \rangle$
<b>B4</b>	$\langle 1 \rangle$	$\langle 3 \rangle \langle 4 \rangle \langle 5 \rangle \langle 6 \rangle$	$\langle 1 \rangle \langle 2 \rangle$	$\langle 1 \rangle \langle 2 \rangle$
<b>B5</b>	$\langle 2 \rangle$	$\langle 1 \rangle \langle 3 \rangle \langle 4 \rangle \langle 5 \rangle$	$\langle 1 \rangle \langle 2 \rangle$	$\langle 2 \rangle$
<b>B6</b>	$\langle 6 \rangle$	$\langle 1 \rangle \langle 2 \rangle \langle 3 \rangle \langle 5 \rangle$	$\langle 2 \rangle$	$\langle 6 \rangle$

### Exercise 9.2.3

**Solution:**

	Use	Def	IN	OUT
<b>B1</b>		a, b	e	a, b, e
<b>B2</b>	a, b	c, d	a, b, e	a, b, c, d, e
<b>B3</b>	b, d		a, b, c, d, e	a, b, c, d, e
<b>B4</b>	a, b, e	d	a, b, c, e	a, b, c, d, e
<b>B5</b>	a, b, c	e	a, b, c, d	a, b, d, e
<b>B6</b>	b, d	a	b, d	