

Math 3342 HW #6

#5c, 5d, 11b, 11e

5c

$L(a^*b^*c^*)$  :

$$S \rightarrow ABC$$

$$A \rightarrow aA \mid \varepsilon$$

$$B \rightarrow bB \mid \varepsilon$$

$$C \rightarrow cC \mid \varepsilon$$

5d

$L((abc)^*)$

$$S \rightarrow abcS \mid \varepsilon$$

11b

This is  $\{(ab)^n \mid n \geq 1\}$

$$S \rightarrow abS \mid ab$$

11e

like  $[1, 2, 7, 0, 5]$

$$S \rightarrow [L] \mid []$$

$$L \rightarrow D \mid D, L$$

$$D \rightarrow 0 \mid 1 \mid 2 \mid \dots \mid 9$$