

Math 3342 Homework #6

Chapter 10 #5c, #11e

Chapter 12 #1f, #1g

#5c

$$S \rightarrow ABC$$

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

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

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

#5d

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

#11e

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

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

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

many ways to do
this one!

#1f

$$\{ a^n b^m \mid m \geq 2n \}$$

more than twice as many b's

$$S \rightarrow aSbb \mid T$$

$$T \rightarrow bT \mid b$$

#1g

$$\{ a^n b^m c^m d^n \}$$

$$S \rightarrow aSd \mid T$$

$$T \rightarrow bTc \mid \varepsilon$$