

Problem 5.1

$$E \rightarrow E == C \mid E != C$$

$$C \rightarrow C < A \mid C > A$$

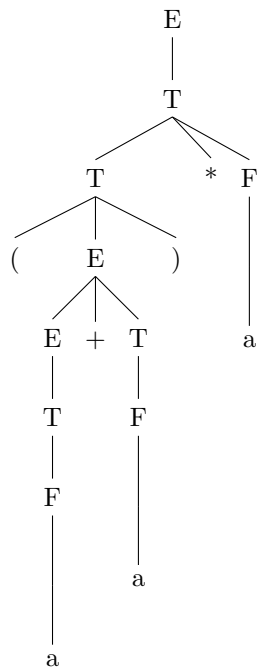
$$A \rightarrow A + M \mid A - M$$

$$M \rightarrow M * N \mid M / N$$

$$N \rightarrow (E) \mid a$$

Problem 5.2

Part a



Part b

$$E \rightarrow T$$

$$\rightarrow T * F$$

$$\rightarrow F * F$$

$$\rightarrow F * F$$

$$\rightarrow (E) * F$$

$$\rightarrow (E + T) * F$$

$$\rightarrow (T + T) * F$$

$$\rightarrow (F + T) * F$$

$$\rightarrow (a + T) * F$$

$$\rightarrow (a + a) * F$$

$$\rightarrow (a + a) * a$$

Part c

$$E \rightarrow T$$

$$\rightarrow T * F$$

$$\rightarrow T * a$$

$$\rightarrow F * a$$

$$\rightarrow (E) * a$$

$$\rightarrow (E + T) * a$$

$$\rightarrow (E + F) * a$$

$$\rightarrow (E + a) * a$$

$$\rightarrow (T + a) * a$$

$$\rightarrow (F + a) * a$$

$$\rightarrow (a + a) * a$$