

$$S \rightarrow (S) | A X A | B$$

$$S \rightarrow (S)$$

$$X \rightarrow * | + | - | \div$$

$$S \rightarrow S X S$$

$$S \rightarrow S X B$$

$$S \rightarrow B X S$$

$$S \rightarrow B X B$$

$$S \rightarrow B$$

$$X \rightarrow * | + | - | \div$$

$$B \rightarrow x | y | z$$

~~$$A \rightarrow S | B$$~~

~~$$A \rightarrow S$$~~

~~$$A \rightarrow B$$~~

$$B \rightarrow x | y | z$$

$$S \rightarrow B$$

$$S \rightarrow (S) = S \rightarrow B S C$$

$$S \rightarrow S X S$$

$$S \rightarrow x$$

$$S \rightarrow y$$

$$S \rightarrow z$$

$$X \rightarrow *$$

$$X \rightarrow +$$

$$X \rightarrow -$$

$$X \rightarrow \div$$

$$B \rightarrow ($$

$$C \rightarrow )$$

$$B \rightarrow ($$

$$C \rightarrow )$$

$$S \rightarrow B D$$

$$D \rightarrow S C$$

$$S \rightarrow S E$$

$$E \rightarrow X S$$

$$S \rightarrow x$$

$$S \rightarrow y$$

$$S \rightarrow z$$

$$X \rightarrow *$$

$$X \rightarrow +$$

$$X \rightarrow -$$

$$X \rightarrow \div$$

$$B \rightarrow ($$

$$C \rightarrow )$$

$\Rightarrow$  Chomsky  
Normal  
Form