1. Consider the grammar $G = \langle \{E, S, N, D, S', E'\}, \mathbb{Z}, P, E \rangle$ with the productions given by $\mathbb{Z} \cup \{-, /, \sim\}$

$$E \rightarrow SE'$$
$$E' \rightarrow -SE' \mid \varepsilon$$
$$S \rightarrow DS'$$
$$S' \rightarrow /DS' \mid \varepsilon$$
$$D \rightarrow \sim N \mid N$$
$$N \rightarrow \alpha \mid (E)$$

where $\alpha \in \mathbb{Z}$ denotes ~~the integers also~~ all integers.

The above is context free, unambiguous and also suitable for top-down parsing (No left recursions).

2. Since it hasn't been asked to give an unambiguous grammar, here is a straightforward CFG $G = \langle \{S\}, \mathbb{Z} \cup \{+, /, \sim\}, P, S \rangle$ with productions given by

$$S \rightarrow \alpha \mid -SS \mid /SS \mid \sim S$$

where α denotes any integer.

3. The production $S \rightarrow -SS$ is NOT linear since there are two non-terminals on the right of the production.