

Given the grammar

$$E \rightarrow E + T \mid T$$

$$T \rightarrow T * F \mid F$$

$$F \rightarrow (E) \mid \text{id}$$

$$\text{id} \rightarrow x \mid y \mid z$$

Derive the following strings. Draw their respective parse trees.

a) $x * (y + z)$

b) $(x * z)$

c) $y + z$

d) $((y + z) * x) + z$