

Example 5.3.

Grammar / Production.

$$1) T \rightarrow FT'$$

$$2) T' \rightarrow * FT'_1$$

$$3) T' \rightarrow \epsilon$$

$$4) F \rightarrow \text{digit}$$

Semantic Rules

$$T'.\text{inh} = F.\text{val} \quad (\text{Inherited } T' \leftarrow F)$$

$$T.\text{val} = T'.\text{syn} \quad (\text{Synthesized } T \leftarrow T')$$

$$T'_1.\text{inh} = T'.\text{inh} \times F.\text{val} \quad (\text{Inherited } T'_1 \leftarrow T', F)$$

$$T'_1.\text{syn} = T'_1.\text{syn} \quad (\text{Synthesized } T'_1 \leftarrow T'_1)$$

$$T'.\text{syn} = T'_1.\text{inh} \quad (\text{Inherited } T' \leftarrow T'_1)$$

$$F.\text{val} = \text{digit}.\text{lexval} \quad (\text{Synthesized } F \leftarrow \text{digit})$$

val and syn are synthesized attributes.

inh is an inherited attribute.

3 * 6

