rate of conversion, $\dot{\xi}$

The rate of conversion for a reaction occurring in a closed system is defined as the time derivative of the extent of reaction:

$$\dot{\xi} = \mathrm{d}\xi/\mathrm{d}t$$

In view of the definition of *extent of reaction* it follows that with reference to any species in a reaction showing time-independent *stoichiometry*:

$$\dot{\xi} = \mathrm{d}\xi/\mathrm{d}t = (1/\nu_i)(\mathrm{d}n_i/\mathrm{d}t)$$

where n_i is the amount of the species at any time and ν_i is its stoichiometric coefficient.

1996, *68*, 180; 1992, *64*, 1573; G.B. 55; 1996, *68*, 989