Levi-Civita and Kronecker-Delta Identities

Given the most general identity relating the Levi-Civita symbol to the Kronecker delta,

$$\epsilon_{ijk}\epsilon_{lmn} = \delta_{il}(\delta_{jm}\delta_{kn} - \delta_{jn}\delta_{km}) - \delta_{im}(\delta_{jl}\delta_{kn} - \delta_{jn}\delta_{kl}) + \delta_{in}(\delta_{jl}\delta_{km} - \delta_{jm}\delta_{kl}),$$

prove the following simpler and more useful identities:

(a) $\epsilon_{ijk}\epsilon_{imn} = \delta_{jm}\delta_{kn} - \delta_{jn}\delta_{km}$;

(b) $\epsilon_{ijk}\epsilon_{ijn} = 2\delta_{kn}$.