MYCIN Certainty Factor Combination Rules

$$CF(rule) = \frac{CF \;\; of \;\; IF \;\; statement \;\; * \;\; CF \;\; of \;\; conclusion}{100}$$

If CF(previous) and CF(rule) are both positive or zero,

$$CF = CF(previous) + \frac{CF(rule) \;\; * \;\; (100 - CF(previous))}{100}$$

If CF(previous) and CF(rule) are both negative;

$$CF = CF(previous) + \frac{CF(rule) \;\; * \;\; (100 + CF(previous))}{100}$$

If CF(previous) * CF(rule) is negative and
CF(previous) + CF(rule) is positive,

$$CF = \frac{[(CF(previous) + CF(rule)) \;\; * \;\; 100] + \frac{100 - MIN}{2}}{100 - MIN}$$

where MIN is the lesser of the absolute values of CF(previous) and CF(rule)

If CF(previous) * CF(rule) is negative and
CF(previous) + CF(rule) is negative,

$$CF = \frac{[(CF(previous) + CF(rule)) \;\; * \;\; 100] - \frac{(100 - MIN)}{2}}{100 - MIN}$$

where MIN is the lesser of the absolute values of CF(previous) and CF(rule)