Fact 3 *The following conditions are equivalent:*
$\rightarrow$ *is confluent*
$\rightarrow$ *has the Church-Rosser property*

Fact 4 *If* $\rightarrow$ *is confluent, every element has at most one normal form.*

Fact 5 *If* $\rightarrow$ *is convergent, every element has a unique normal form.*

Fact 6 *If* $\rightarrow$ *is convergent, and* $x \stackrel{*}{\leftrightarrow} y$*, then* $x\downarrow = y\downarrow$.

Fact 7 *Simplification orders are well-founded (consequence of Kruskal's theorem).*

Fact 8 *A rewrite system* R *is terminating iff all its rules are contained in a reduction order.*

Fact 9 *A term order which is reduction order, total on ground terms, must have Subterm Property. (Hence it is a simplification order.)*