Rule

lhs \rightarrow rhs represents a rule that transforms lhs to rhs.

lhs \rightarrow rhs evaluates rhs immediately. You can apply rules using Replace. The assignment lhs = rhs specifies that the rule lhs \rightarrow rhs should be used whenever it applies. When you enter a rule like lhs \rightarrow rhs or Rule[lhs, rhs], Mathematica inserts a “compiled” form of the rule as a third, hidden, element. See page 576. See also: Replace, Set, AlgebraicRules.