

**function** MODEL-BASED-REFLEX-AGENT(*percept*) **returns** an action  
**persistent:** *state*, the agent's current conception of the world state  
                  *transition\_model*, a description of how the next state depends on  
                  the current state and action  
                  *sensor\_model*, a description of how the current world state is reflected  
                  in the agent's percepts  
                  *rules*, a set of condition-action rules  
                  *action*, the most recent action, initially none

*state*  $\leftarrow$  UPDATE-STATE(*state*, *action*, *percept*, *transition\_model*, *sensor\_model*)

*rule*  $\leftarrow$  RULE-MATCH(*state*, *rules*)

*action*  $\leftarrow$  *rule.ACTION*

**return** *action*