**function** ExpectiMiniMax-Decision(state) **returns** *an action*

**return** arg maxa ϵ Actions(*s*) P(Result(*state, a*))

**function** Max-Value(*state*) **returns** *a utility value*

**if** Terminal-Test(*state*) **then return** Utility(*state*)

*v*

**for each** *a* **in** Actions(*state*) **do**

*v* Max(*v*, P-Value(Result(*s, a*)))

**return** *v*

**function** Min-Value(*state*) **returns** *a utility value*

**if** Terminal-Test(*state*) **then return** Utility(*state*)

*v*

**for each** *a* **in** Actions(*state*) **do**

*v* Min(*v*, P-Value(Result(*s, a*)))

**return** *v*

**function** P-Value(*state*) **returns** *a utility value*

*sum*

**for each** *r* **in** Roll(*state*) **do**

**if** Player(*state*) = Max **then**

*sum* *sum* + Max(*v*, Min-Value(Result(*s, r*))) \* Chance(*r)*

**else**

*sum* *sum* + Min(*v*, Max-Value(Result(*s, r*))) \* Chance(*r)*

**return** *sum*