

EXTENDS *Naturals*

```
--algorithm Clock{
variables hour ∈ 0 .. 11;
  fair process ( Proc = 1 ) {
    start: while ( TRUE ) {
      hour := (hour + 1)%12;
    }
  }
}
```

BEGIN TRANSLATION

VARIABLE *hour*

$vars \triangleq \langle hour \rangle$

$ProcSet \triangleq \{1\}$

$Init \triangleq \text{Global variables}$
 $\wedge hour \in 0 \dots 11$

$Proc \triangleq hour' = (hour + 1)\%12$

$Next \triangleq Proc$

$Spec \triangleq \wedge Init \wedge \Box[Next]_{vars}$
 $\wedge WF_{vars}(Proc)$

END TRANSLATION

$hourInRange \triangleq \Box(hour \leq 12)$ State predicate

* Modification History
 * Last modified Wed Jun 05 19:00:51 CEST 2019 by Naxxo
 * Created Thu Jan 31 10:15:52 CET 2019 by Naxxo