Times during the day

- You can use the function symbol am so that am(H,M) denotes the time H:M a.m., when H is an integer between 1 and 12 and M is an integer between 0 and 59.
- For example, am(10,38) denotes the time 10:38 a.m.; am denotes a function from pairs of integers into times.
- Similarly, you can define the symbol pm to denote the times after noon.

```
before(am(H1,M1),pm(H2,M2)).
before(am(12,M1),am(H2,M2)) ← H2<12.
before(am(H1,M1),am(H2,M2)) ← H1<H2 ∧ H2<12.
before(am(H,M1),am(H,M2)) ← M1<M2.
before(pm(12,M1),pm(H2,M2)) ← H2<12.
```

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before(pm(H1,M1),pm(H2,M2)) ← H1<H2 ∧ H2<12.
before(pm(H,M1),pm(H,M2)) ← M1<M2.
```