Exercise 1.27. Demonstrate that the Carmichael numbers listed in footnote 47 really do fool the Fermat test. That is, write a procedure that takes an integer n and tests whether a^n is congruent to a modulo n for every $a < n$, and try your procedure on the given Carmichael numbers.

Answer.

```
(define (carm-fool n)
  (carm-test n 1))

(define (carm-test n a)
  (define (try-it a)
    (= (expmod a n n) a))
  (cond ((>= a n) true)
        ((try-it a) (carm-test n (+ a 1)))
        (else false)))
```