329 Here is one way that we might consider defining the **for**-loop. Let j, n, k and m be integer expressions, and let i be a fresh name.

for i:= *nil* **do** P **od** = *ok*

for i:= j **do** P **od** = (substitute j for i in P)

for i:= (n;..k); (k;..m) **do** P **od** = **for** i:= n;..k **do** P **od**. **for** i:= k;..m **do** P **od**

(a) From this definition, what can we prove about **for** i:= 0;..n **do** n:= n+1 **od** where n is an integer variable?

(b) What kinds of **for**-loop are in the programming languages you know?

no solution given