Exercise 1 Hint

To see whether an integer `M` is odd or not, you could work out `M mod 2`.

Remember that you can't modify the arguments of a Maple procedure. Since you may need to swap `M` and `N`, you'll probably need to copy them into two other variables (e.g. start with `m:=M; n:=N;`).

For the mathematical question, think binary.

Note that the algorithm is set out in a way which is designed to be as easy as possible to translate into Maple. If you're really stuck, use the following "template", in which words written in *italics* need to be translated into appropriate Maple commands.

```
RussianMultiplication:=proc(m::posint, n::posint)
local M,N,R;
Set M to be the smaller of m and n, N to be the larger
Set R to be 0 if M is even, N if M is odd
while M>1 do
   Set M to be half M, ignoring remainder
   N:=2*N;
   if M is odd
      then R:=R+N;
   end if;
end do;
R;
end proc;
```