Fibonacci numbers

The Fibonacci numbers are the numbers in the following integer sequence (Fn):

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, ...

such as

$F(n) = F(n-1) + F(n-2)$ with $F(0) = 0$ and $F(1) = 1$.

Given a number, say product, we search two Fibonacci numbers

F(n) and F(n+1) verifying

$F(n) * F(n+1) = prod$.

Your function productFib takes an NSNumber (prod) and returns an array of NSNumbers:

[F(n), F(n+1), (@0 or @1))]

@1 if $F(n) * F(n+1) = prod$ and @0 if $F(n) * F(n+1)$ is not equal to prod

Example:

 productFibonacciSequenceFor(@15) # should return (@3, @5, @1),
 # since F(4) = 3, F(5) = 5 and 15 = 3 * 5

 productFib(30) # should return (@5, @8, @0),
 # since F(4) = 3, F(5) = 5, F(6) = 8 and 3 * 5 < 30 < 5 * 8