

1 The problem

This is a problem 70 from Project Euler.

2 Definitions

This problems deals with $\varphi(n)$ function. This function calculation is based on prime divisors of its argument:

$$\varphi(n) = \prod_{i=1}^k p_i^{\alpha_i-1} (p_i - 1)$$

```
import Data.List (delete, (\\))  
import Data.Maybe (maybeToList)  
import Control.Monad (guard)
```