

99 questions/Solutions/15

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(**) Replicate the elements of a list a given number of times.

```
repli :: [a] -> Int -> [a]
repli xs n = concatMap (replicate n) xs
```

or, in Pointfree style:

```
repli = flip $ concatMap . replicate
alternatively, without using the
replicate
function:
repli :: [a] -> Int -> [a]
repli xs n = concatMap (take n . repeat) xs
```

or, using the list monad:

```
repli :: [a] -> Int -> [a]
repli xs n = xs >=> replicate n
or, a more verbose solution without the use of
replicate
:
repli :: [a] -> Int -> [a]
repli xs n = foldl (\acc e -> acc ++ repli' e n) [] xs
  where
    repli' _ 0 = []
    repli' x n = x : repli' x (n-1)
```

or, a version that does not use list concatenation:

```
repli :: [a] -> Int -> [a]
repli [] _ = []
repli (x:xs) n = foldr (const (x:)) (repli xs n) [1..n]
```

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