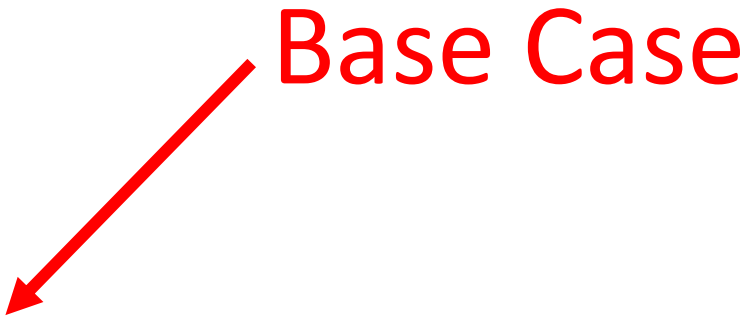
```
fastRev xs = fastRev' xs []
        where
            fastRev' [] acc = acc
            fastRev' (x:xs) acc = fastRev' xs x:acc
```

```
fastRev [1,2,3,4] =  fastRev' [1,2,3,4]    []
                  =  fastRev' [2,3,4]     [1]
                  =  fastRev' [3,4]     [2,1]
                  =  fastRev' [4]     [3,2,1]
                  =  fastRev' []    [4,3,2,1]
```



```
zip [] _ = []
zip _ [] = []
zip (x:xs) (y:ys) = (x,y) : zip xs ys
```

Base Case

```
zip [1,2,3] [4,5]   =  (1,4):(zip [2,3] [5])
                    =  (1,4):((2,5):(zip [3] []))
                    =  (1,4):((2,5):[]) = (1,4):[(2,5)] = [(1,4),(2,5)]
```

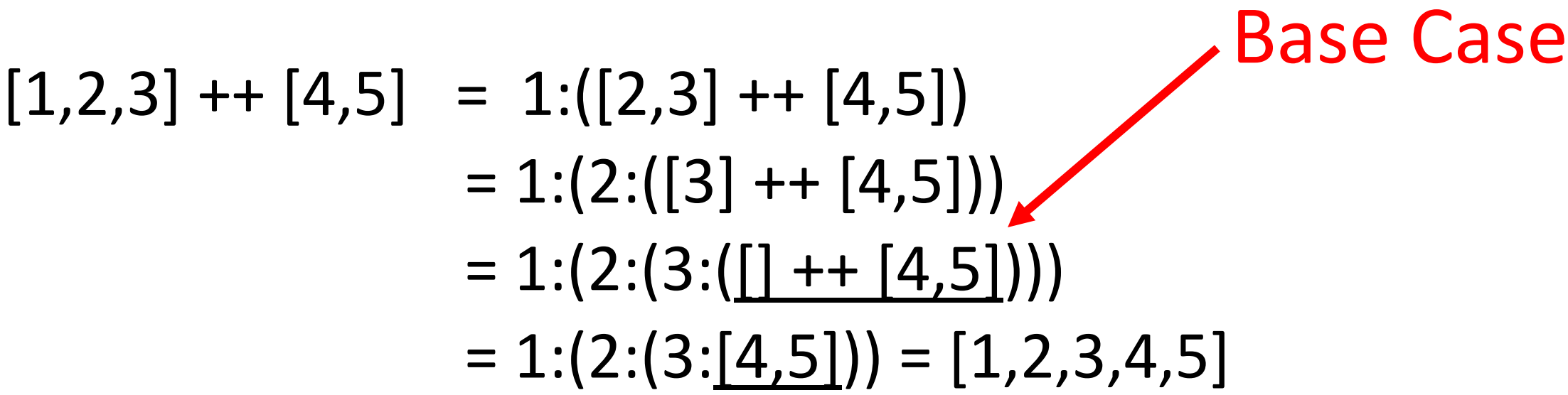
```
drop 0 xs = xs
drop _ [] = []
drop n (_:xs) = drop (n-1) xs
```

```
drop 3 [1,2,3,4] = drop 2 [2,3,4]
                 = drop 1 [3,4]
                 = drop 0 [4]
```

Base Case

[] ++ ys = ys

(x:xs) ++ ys = x : (xs ++ ys)



```
even 0 = True
even n = odd (n-1)
odd 0 = False
odd n = even (n-1)

even 4 = odd 3
       = even 2
       = odd 1
       = even 0
       = True
```