

```
data Expr
= Add Expr Expr
| Mul Expr Expr
| Con Int
```

```
type ESem b
= ( b → b → b
    , b → b → b
    , Int → b )
```

```
foldE :: ESem b → Expr → b
foldE (a,m,c) = f where
  f (Add e1 e2) = a (f e1) (f e2)
  f (Mul e1 e2) = m (f e1) (f e2)
  f (Con n)     = c n
```

```
evalExpr :: Expr → Int
evalExpr = foldE evalSem
```

```
evalSem :: ESem Int
evalSem = ( (+) , (*) , id )
```