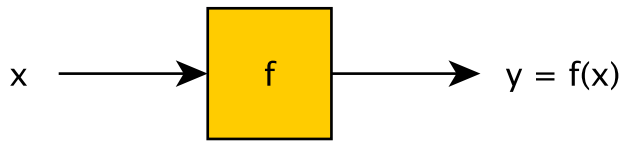
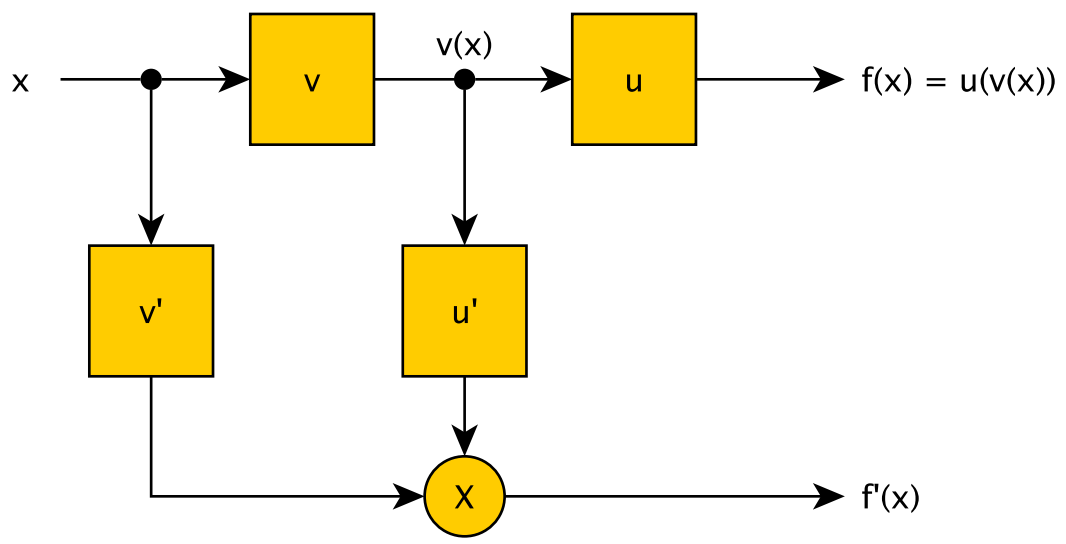
function f maps x to y

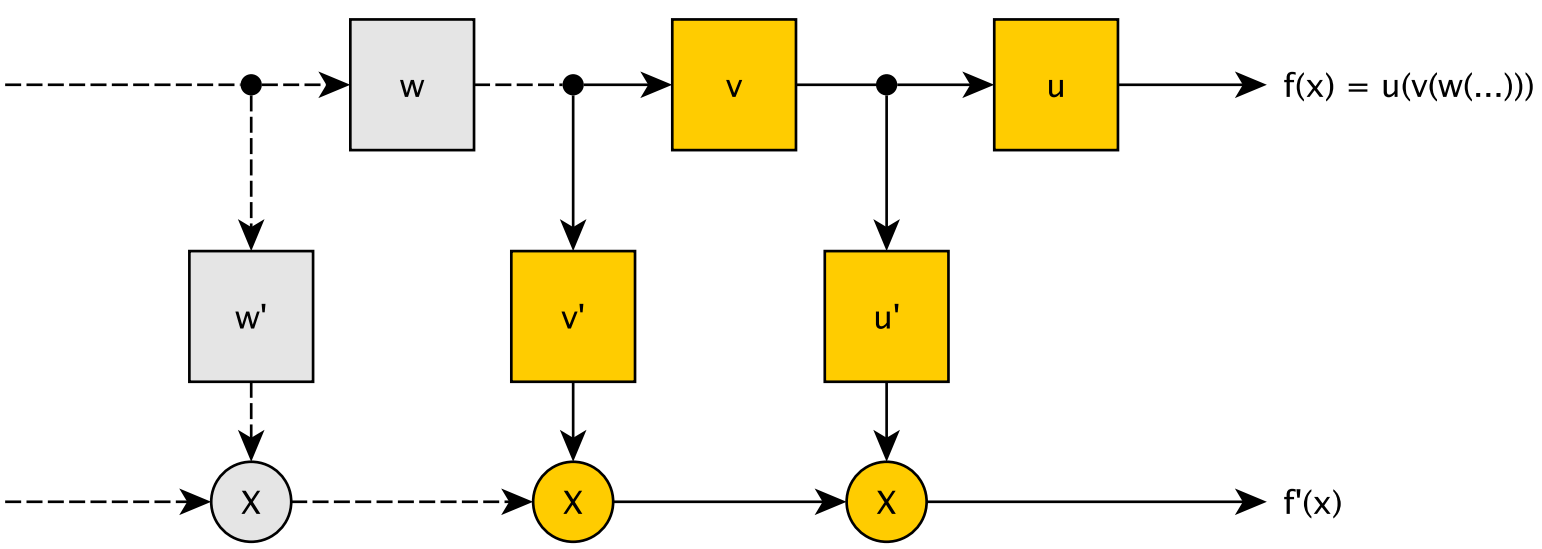



Chain rule

$f(x) = u(v(x)) \dashrightarrow f'(x) = u'(v(x)) \cdot v'(x)$




more generalized:
add a branch for each function composition




Remember the subtle differences:

- look at f(x) as a function of a weight, not of input data
- there is a difference in function composition:
  - f( u(x1,x2) )
  - f( u(x1), x2 )