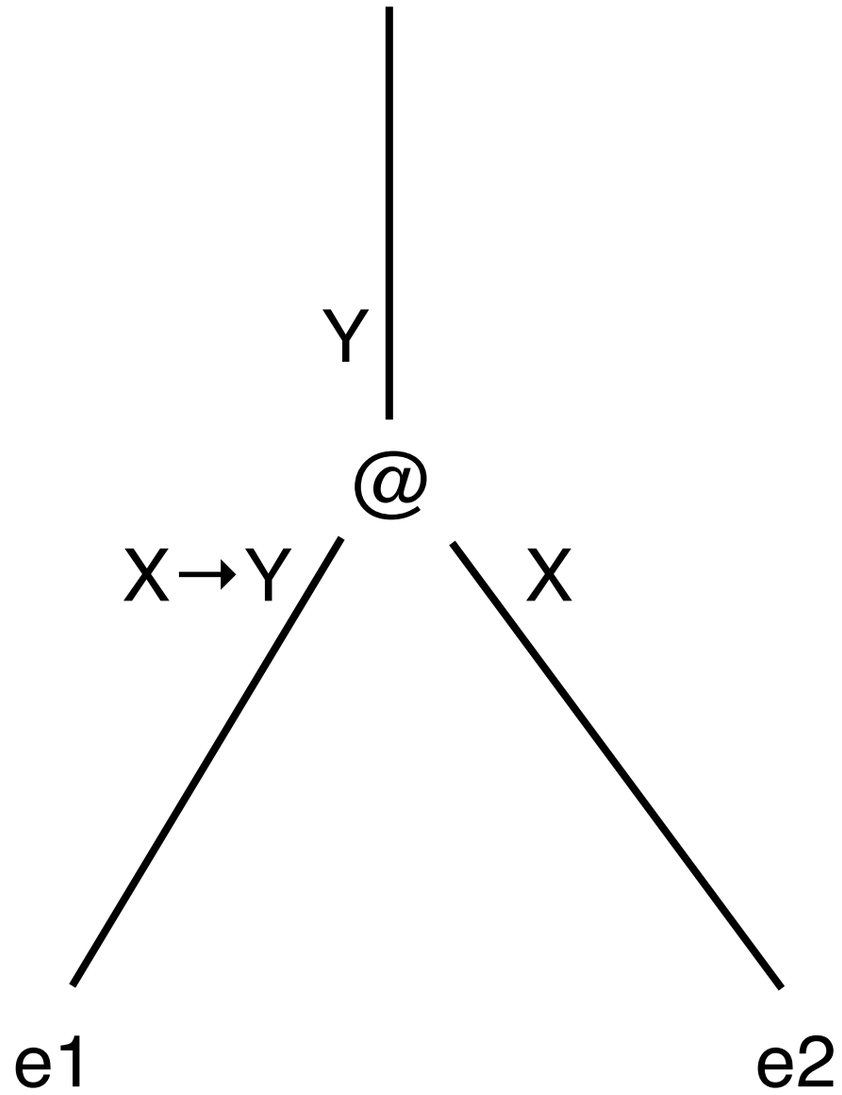
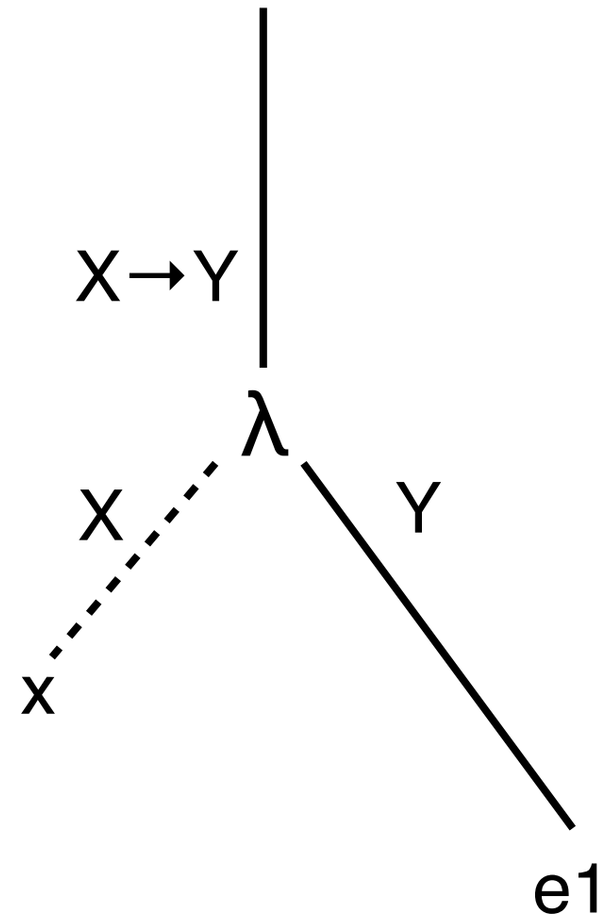
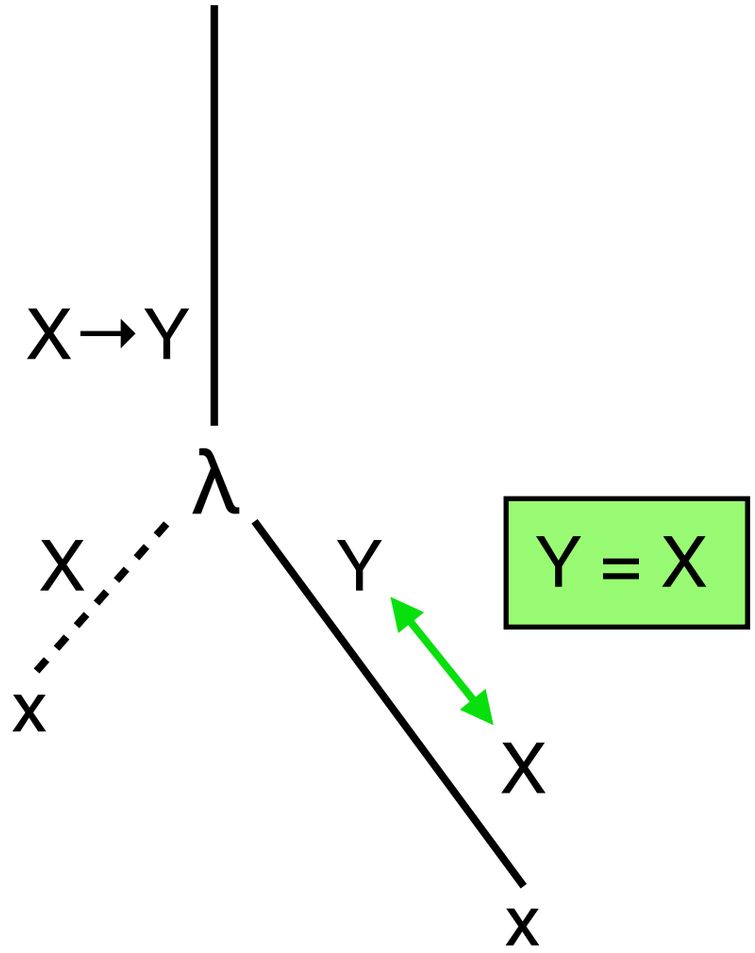
$$\frac{\vdash e1 : X \to Y \qquad \vdash e2 : X}{\vdash e1 \ @ \ e2 : Y}$$



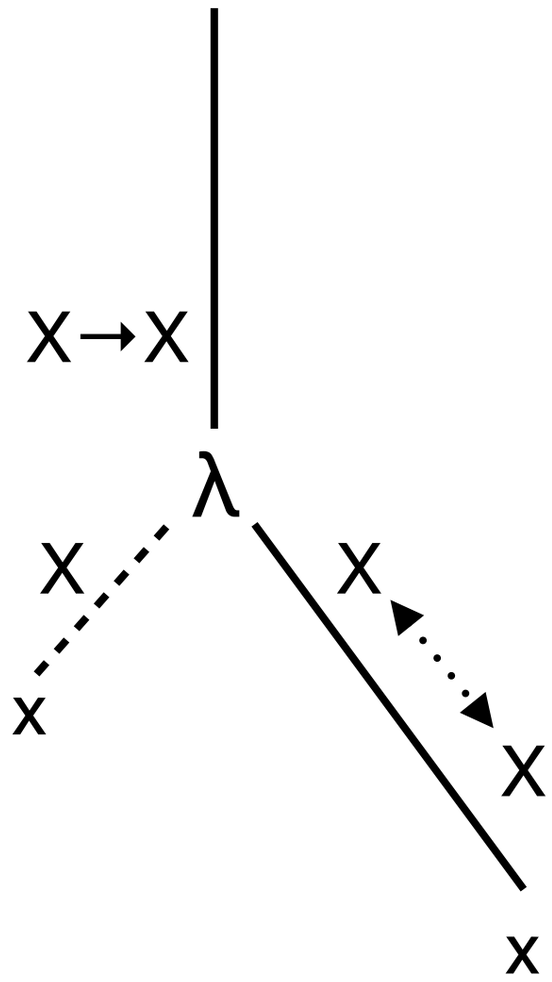
$$\frac{x : X \vdash e1 : Y}{\vdash \lambda x.e1 : X \to Y}$$



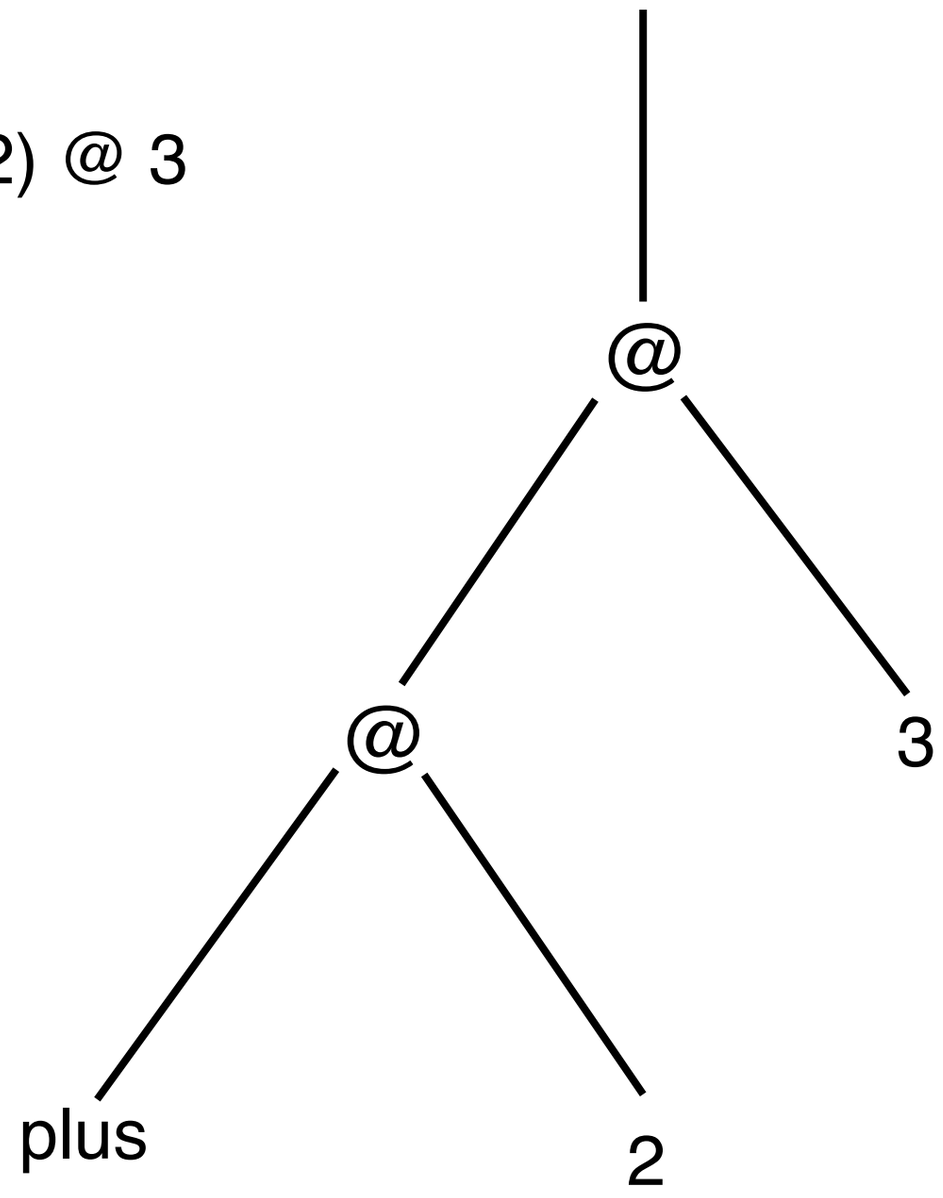
⊢ λx. x : X→X



⊢ λx. x : X→X

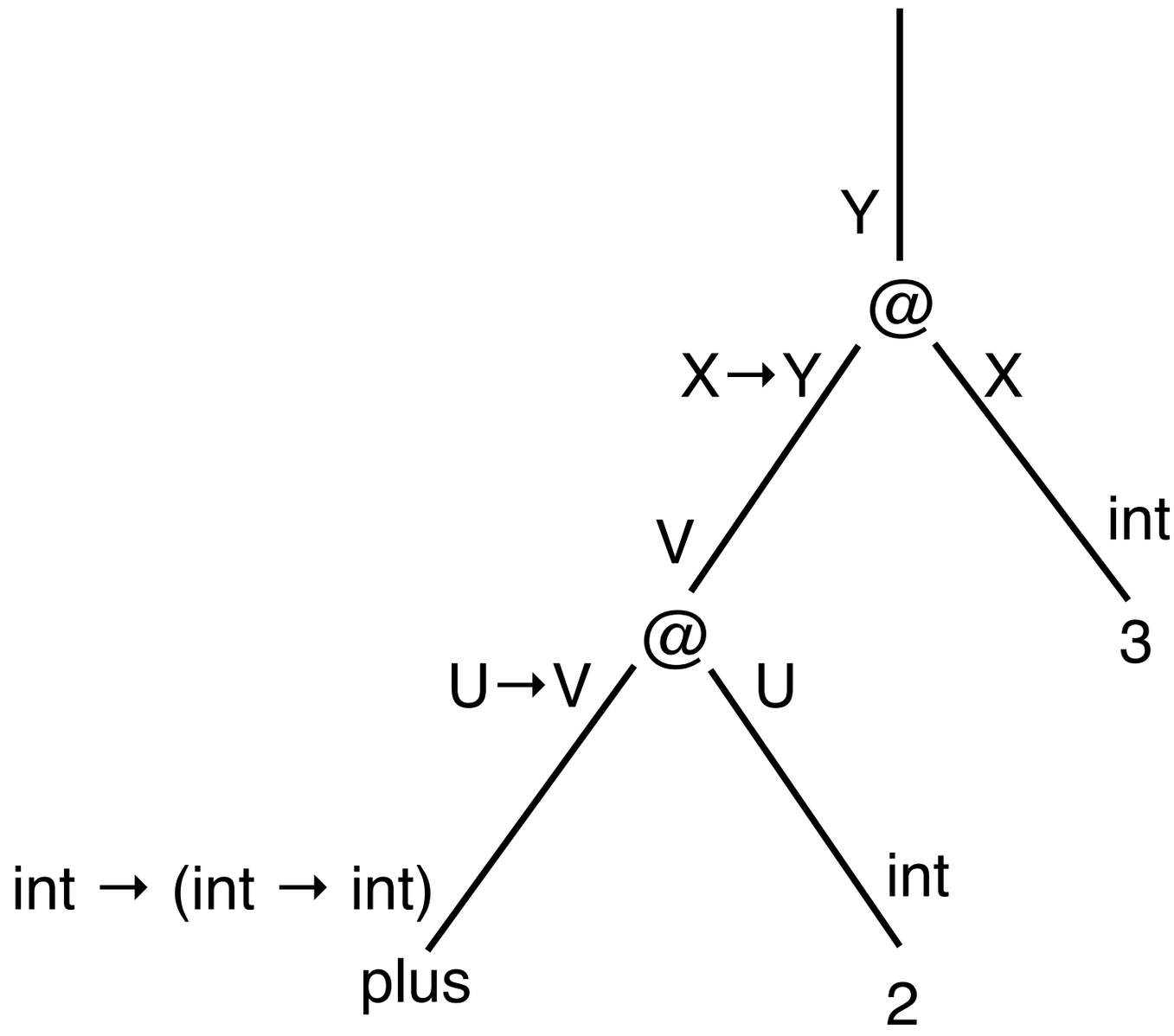


(plus @ 2) @ 3

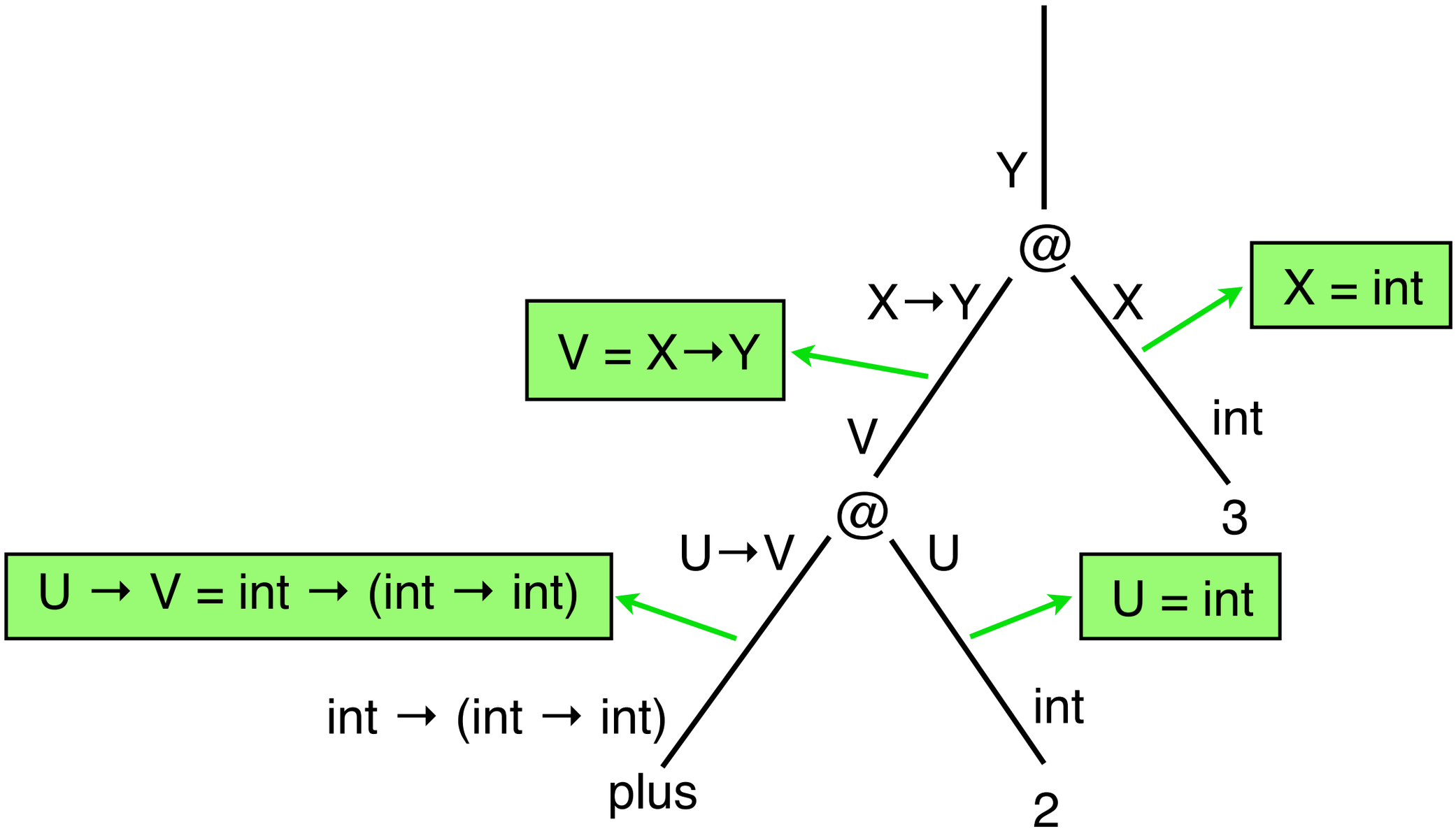


Annotate with types

plus : int → (int → int)

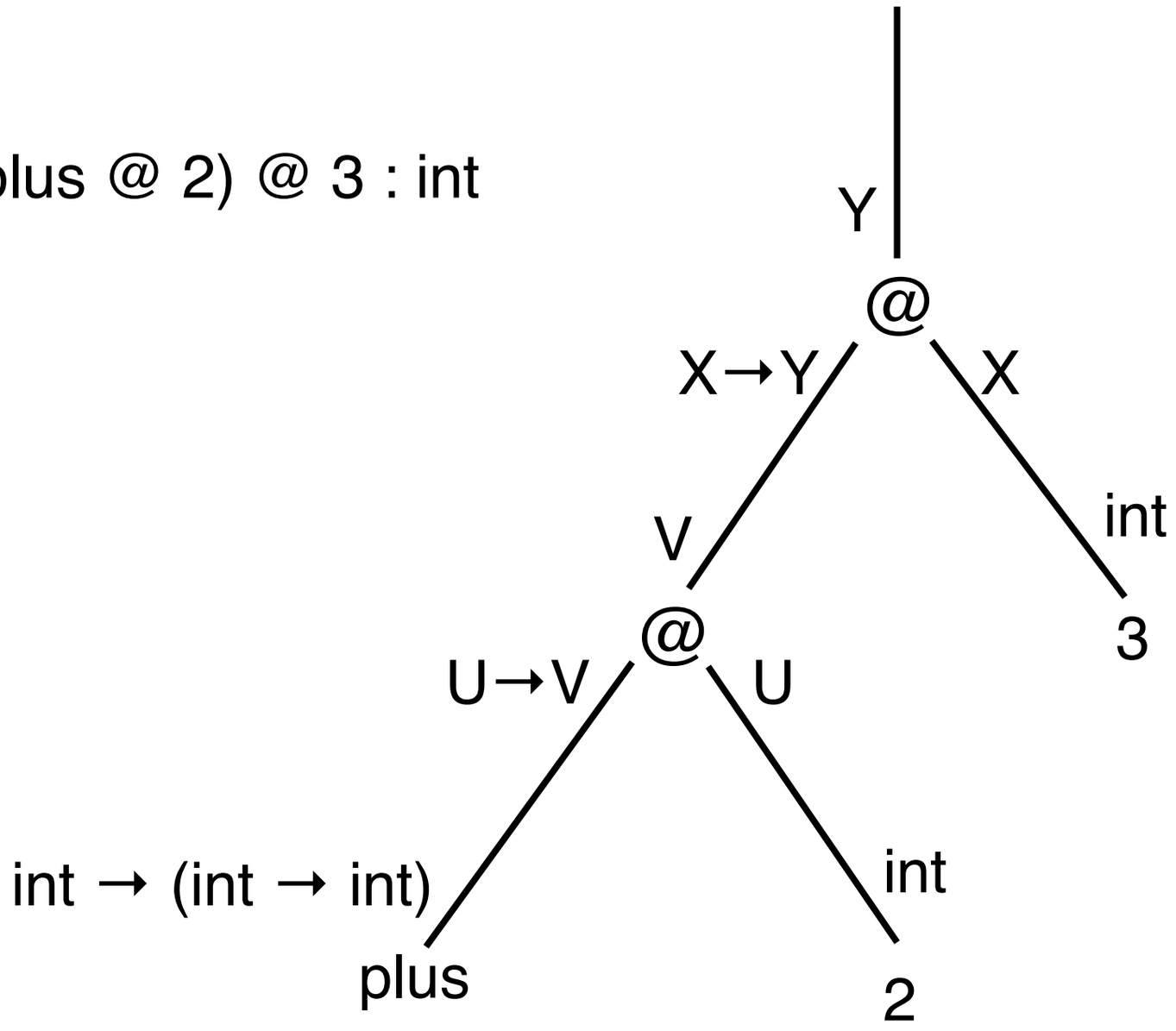


plus : int → (int → int)



plus : int → (int → int)

I- (plus @ 2) @ 3 : int



X = int

U = int

V = X→Y

U → V = int → (int → int)

unification

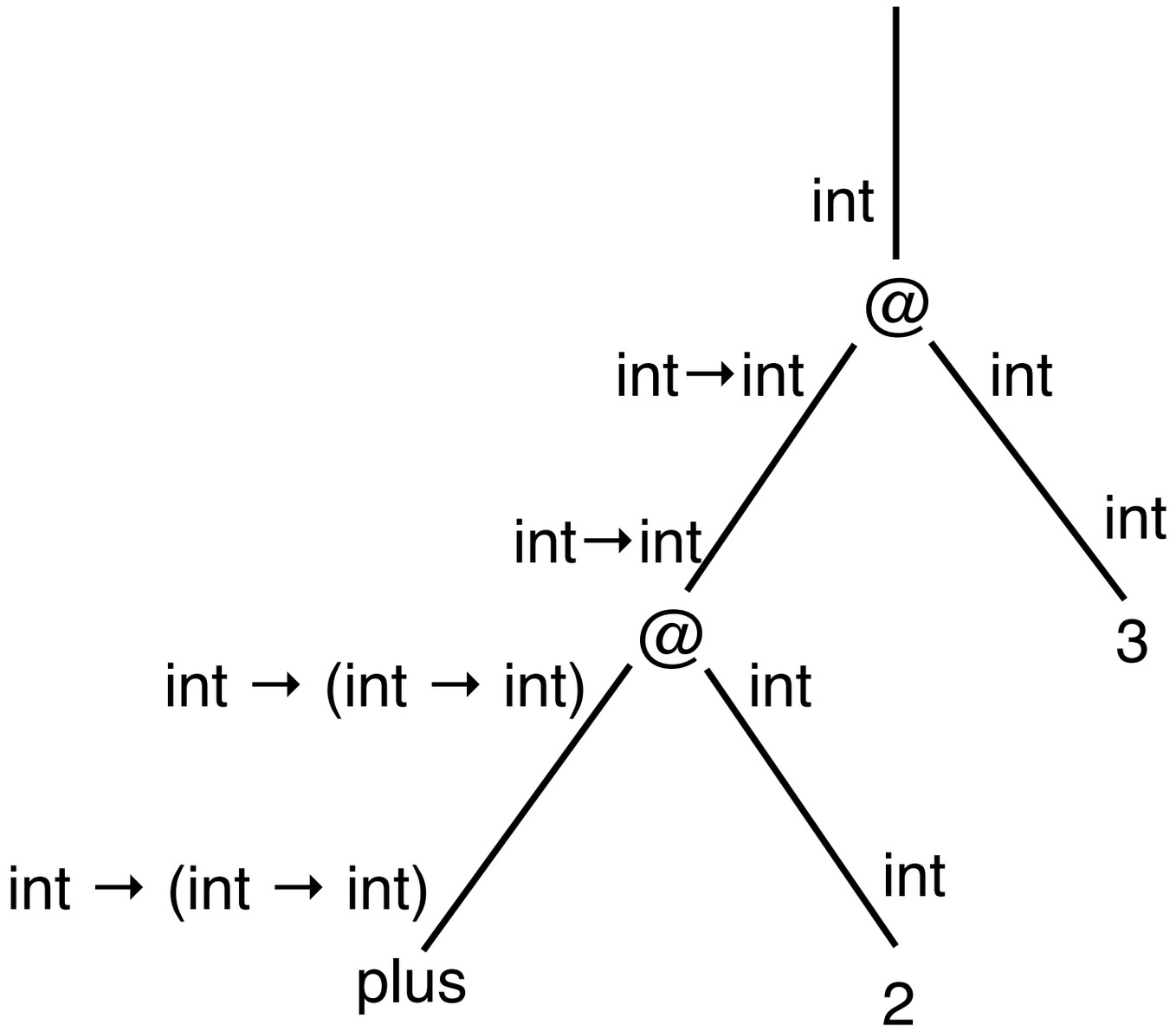
X = int

U = int

V = int→int

Y = int

Γ = plus : int → (int → int)



X = int

U = int

V = int→int

Y = int

Γ I- (plus @ 2) @ 3 : int