Rule of Sequential Composition

$$wp(S_1;S_2,Q) \equiv wp(S_1,\ wp(S_2,Q))$$

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wp(S1;S2,Q) ≡ wp(S1, wp(S2,Q))

wp((x:= x+1; y := y+1), x = y)

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≡ x = y

Rule of Sequential Composition

wp((x:= 2*x+1; y := y-1), y = 3*x)

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≡ wp(x := 2*x+1, wp(y := y-1, y = 3*x))

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≡ y-1 = 3*(2*x+1)

Rule of Sequential Composition

wp((x:= 2*x+1; y := y-1), y = 3*x)

≡ wp(x := 2*x+1, wp(y := y-1, y = 3*x))

≡ wp(x := 2*x+1, y-1 = 3*x))

≡ y-1 = 3*(2*x+1)

≡ y = 6*x + 4