**Problem 04:**

To calculate the values of (Q[t/v])[y/v] and Q[(t[y/v])/v], let's substitute the given values step by step:

First, let's calculate (Q[t/v])[y/v]:

Replace t/v in Q:

Q[t/v] ≡ ((x2 + v) ≤ (x\*v))[t/v] ≡ (x2 + v) ≤ (x\*v)[x+v/v] ≡ (x2 + x + v) ≤ (x\*(x + v))

Replace y/v in (Q[t/v]):

(Q[t/v])[y/v] ≡ (x2 + x + v) ≤ (x\*(x + v)) [y/v] ≡ (x2 + x + y) ≤ (x\*(x + y))

Therefore, (Q[t/v])[y/v] = (x2 + x + y) ≤ (x\*(x +y))

Now, let's calculate Q[(t[y/v])/v]:

Replace y/v in t[y/v]:

t[y/v] ≡ (x+v)[y/v] ≡ (x+v[y/v]) ≡ x+y

Replace y in t[y/v]:

[(t[y/v])/v] ≡ [x+y/v]

Therefore, Q[(t[y/v])/v] ≡ Q [x+y/v]

Q [x+y/v] ≡ ((x2 + v) ≤ (x\*v)) [x+y/v] ≡ (x2 + x + y) ≤ (x\*(x + y))

* (Q[t/v])[y/v] ≡ Q[(t[y/v])/v]