$$f(x) = f(x^{P}) = f(x^{G}) \land v = 0$$

$$f(x) \leq f(x^{P}) \leq f(x^{G})$$

$$f(x) > f(x) > f(x^{G})$$

$$F(x) = f(x^{P}) = f(x^{G}) \land v > 0$$

$$F(x) = f(x^{P}) \leq f(x^{G})$$