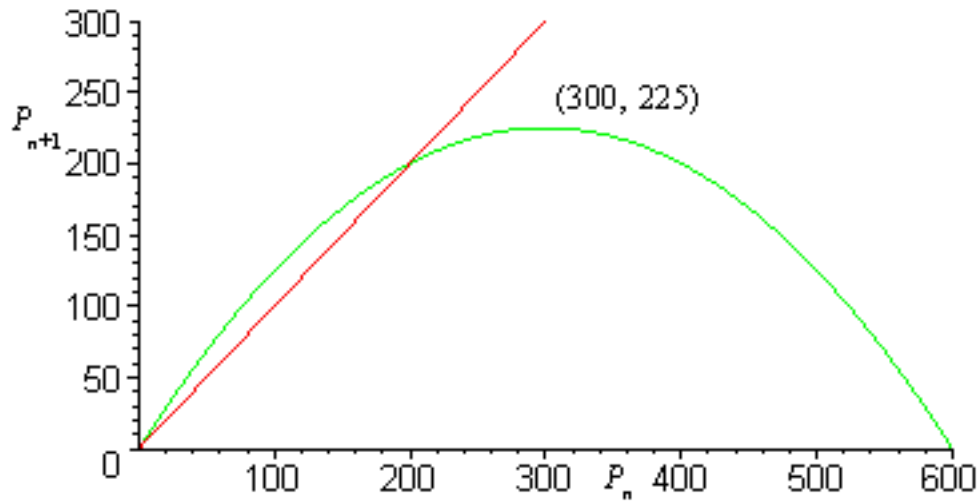


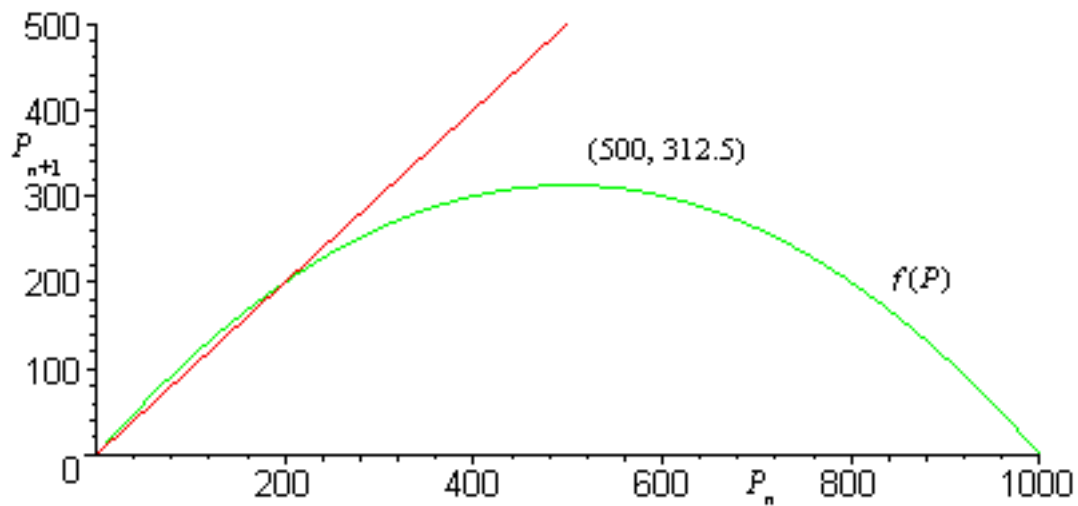
1. a. $P_1 = 68.75$, $P_2 = 91.3$, and $P_3 = 116.1$.

b. The P_n -intercepts are $(0, 0)$ and $(600, 0)$, and the vertex is $(300, 225)$. The equilibria are $P_e = 0$ and 200 .



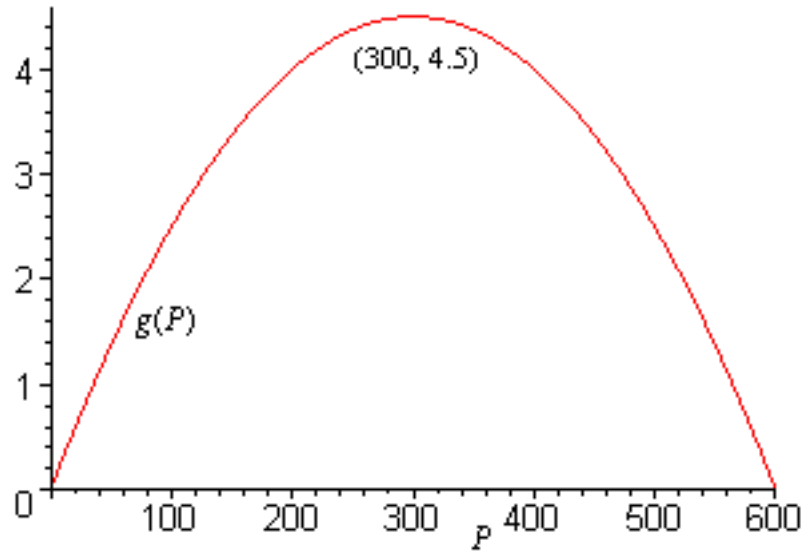
2. a. $P_1 = 234.4$, $P_2 = 224.3$, and $P_3 = 217.4$. The equilibria are $P_e = 0$ and 200 .

b. The P_n -intercepts are $(0, 0)$ and $(1000, 0)$, and the vertex is $(500, 312.5)$.



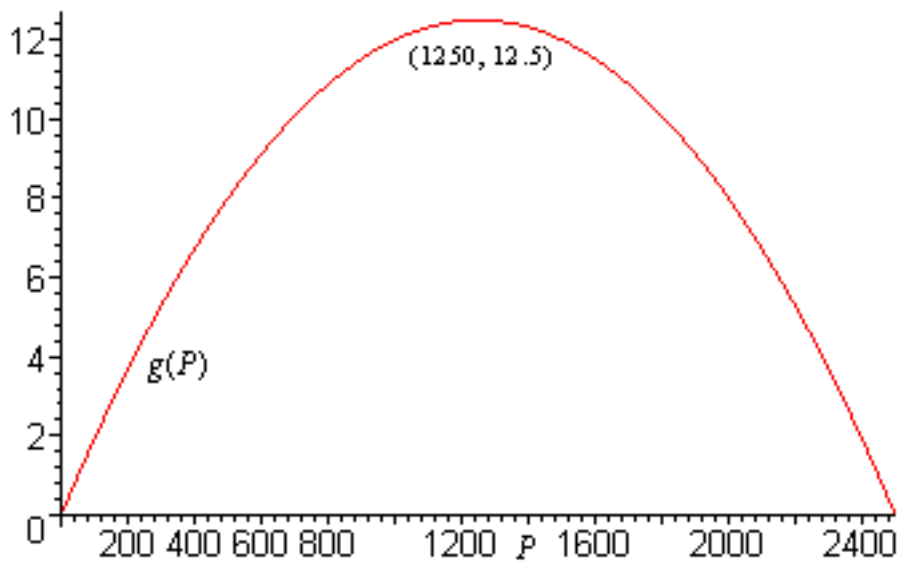
3. a. The growth rate is zero at $P = 0$ and 600 , and the vertex is $(300, 4.5)$. The graph is below.

b. $P_1 = 102.5$, $P_2 = 105.0$, and $P_3 = 107.6$. The equilibria are $P_e = 0$ and 600 .



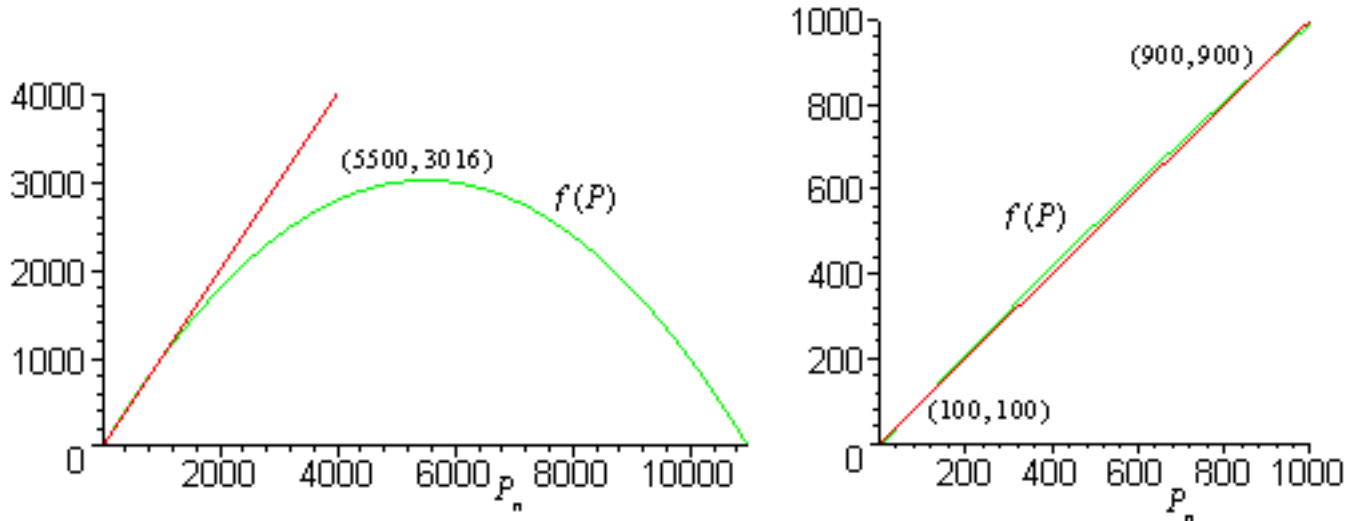
4. a. The growth rate is zero at $P = 0$ and 2500 , and the vertex is $(1250, 12.5)$. The graph is below.

b. $P_1 = 4900$, $P_2 = 4806$, and $P_3 = 4717$. The equilibria are $P_e = 0$ and 2500 .



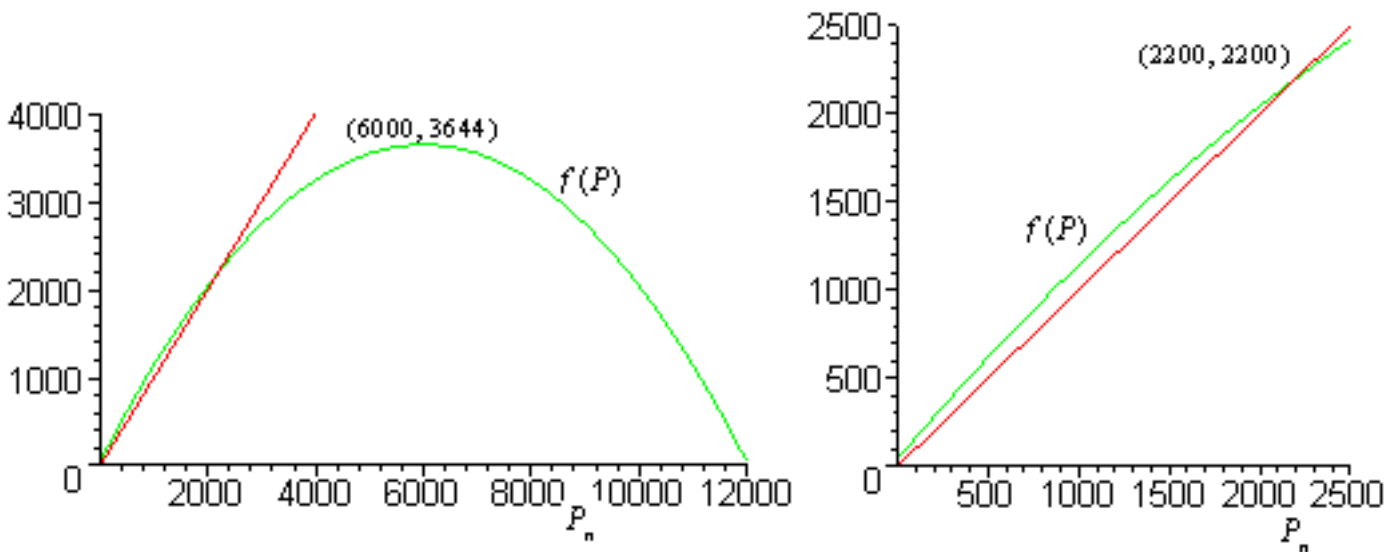
5. a. $P_1 = 516$, $P_2 = 532$, and $P_3 = 548$.

b. The P_n -intercepts are $P_n = 8.188$ and $10,992$, and the vertex is $(5500, 3016)$. The equilibria are $P_e = 100$ and 900 . Two graphs are shown with the first showing the parabola with its vertex and intercepts, while the second plot shows the equilibria where the updating function and identity map intersect.



6. a. $P_1 = 1144$, $P_2 = 1286$, and $P_3 = 1422$.

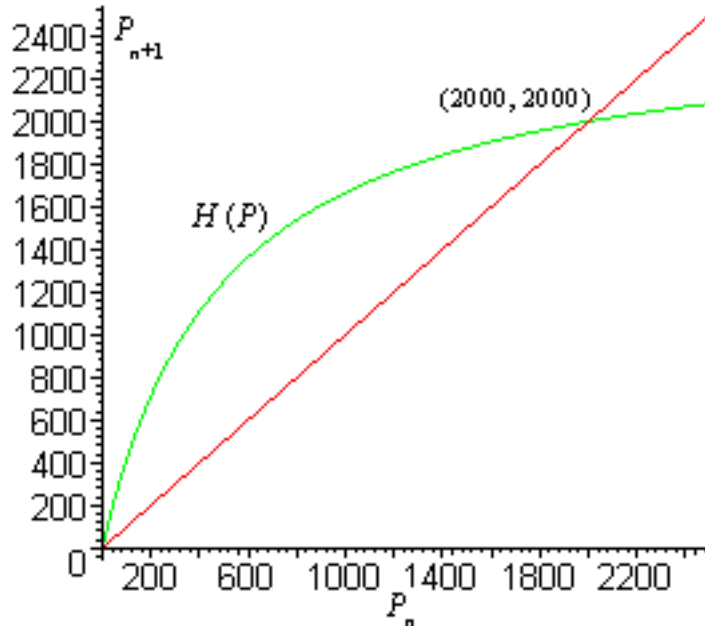
b. The P_n -intercepts are $P_n = -36.56$ and $12,037$, and the vertex is $(6000, 3644)$. There is only one equilibrium at $P_e = 2200$. (The other point of intersection is negative.) Two graphs are shown with the first showing the parabola with its vertex and intercepts, while the second plot shows the equilibrium where the updating function and identity map intersect.



7. a. $p_1 = 1250$, $p_2 = 1786$, and $p_3 = 1953$.

b. The p -intercept is $(0, 0)$, while the horizontal asymptote is $H = 2500$. The graphs of $H(p)$ and the identity map are shown below with the intersections giving the equilibria.

c. The equilibria are $P_e = 0$ and 2000 .



8. a. $p_1 = 500$, $p_2 = 192$, and $p_3 = 409$.

b. The p -intercept is $(0, 0)$, while the horizontal asymptote is $H = 0$. The graphs of $H(p)$ and the identity map are shown below with the intersections giving the equilibria.

c. The equilibria are $P_e = 0$ and 300 .

