\[
\begin{align*}
(1) & \quad 0 = x^2 (g_2 + x) + 1 \\
(2) & \quad 0 = g_2 (g_2 + x) - 1
\end{align*}
\]
\[ \text{Let } D = (x_2, y_2), \quad x_2 \neq 0, \quad y_2 \neq 0 \]

\[ \text{Suppose } (x, y) \text{ is the point of intersection.} \]

\[ \frac{x}{5} + \frac{y}{2} = 1 \]

\[ \text{Set } P(x, y) \text{ as follows:} \]

\[ \text{Local point } = \text{Local point} \]

\[ \text{Fundamental point} = (0, \frac{10}{3}) \]

\[ \text{Suppose } (x, y) \text{ is the point of intersection.} \]

\[ \text{Fundamental condition} \]

\[ \frac{10}{3} + \frac{y}{2} = 1 \]

\[ \text{Let } D = (x_2, y_2), \quad x_2 \neq 0, \quad y_2 \neq 0 \]

\[ \text{Suppose } (x, y) \text{ is the point of intersection.} \]

\[ \frac{x}{5} + \frac{y}{2} = 1 \]

\[ \text{Set } P(x, y) \text{ as follows:} \]

\[ \text{Local point } = \text{Local point} \]

\[ \text{Fundamental point} = (0, \frac{10}{3}) \]

\[ \text{Suppose } (x, y) \text{ is the point of intersection.} \]

\[ \frac{10}{3} + \frac{y}{2} = 1 \]

\[ \text{Let } D = (x_2, y_2), \quad x_2 \neq 0, \quad y_2 \neq 0 \]

\[ \text{Suppose } (x, y) \text{ is the point of intersection.} \]

\[ \frac{x}{5} + \frac{y}{2} = 1 \]

\[ \text{Set } P(x, y) \text{ as follows:} \]

\[ \text{Local point } = \text{Local point} \]

\[ \text{Fundamental point} = (0, \frac{10}{3}) \]

\[ \text{Suppose } (x, y) \text{ is the point of intersection.} \]
5.4.3 Optimizing and Scheduling

It is easy to prove that if the machine times are

\[ t(x, y) = \begin{cases} 
0 & \text{if } x = 0, 2, 4, \ldots \\
1 & \text{otherwise}
\end{cases} \]

then the scheduling problem reduces to finding the shortest path in

\[ \begin{array}{c}
0 \quad 2 \\
1 \quad 0
\end{array} \]

Since the scheduling problem reduces to finding the shortest path in

\[ (x, y) = \begin{cases} 
0 & (x, y) = \frac{0}{2} \\
1 & (x, y) = \frac{1}{2}
\end{cases} \]

we can use dynamic programming to solve it. The optimal schedule is

\[ \begin{array}{c}
0 \quad 2 \\
1 \quad 0
\end{array} \]

\[ (x, y) = \begin{cases} 
0 & (x, y) = \frac{0}{2} \\
1 & (x, y) = \frac{1}{2}
\end{cases} \]

and the schedule is given by

\[ \begin{array}{c}
0 \quad 2 \\
1 \quad 0
\end{array} \]

Ex 1: This example illustrates the use of dynamic programming to

\[ \begin{array}{c}
0 \quad 2 \\
1 \quad 0
\end{array} \]

\[ (x, y) = \begin{cases} 
0 & (x, y) = \frac{0}{2} \\
1 & (x, y) = \frac{1}{2}
\end{cases} \]

and the schedule is given by

\[ \begin{array}{c}
0 \quad 2 \\
1 \quad 0
\end{array} \]
Ex. 1. Bestäm största värden av

$$f(x,y) = x^2 + y^2$$

under

$$x^2 + y^2 = 1.$$