

# 1 Product 1

$$\varphi_1(1) = \max \left\{ 4.75106465816068 \right\} = 4.75106465816068, \quad x_1^0 = 1$$

$$\varphi_1(2) = \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \end{array} \right\} = 4.975243199295103, \quad x_1^0 = 2$$

$$\varphi_1(3) = \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \end{array} \right\} = 4.998149081378998, \quad x_1^0 = 3$$

$$\varphi_1(4) = \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \end{array} \right\} = 4.999877116885469, \quad x_1^0 = 4$$

$$\varphi_1(5) = \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \end{array} \right\} = 4.999992352446667, \quad x_1^0 = 5$$

$$\varphi_1(6) = \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ 4.999999543100626 \end{array} \right\} = 4.999999543100626, \quad x_1^0 = 6$$

$$\varphi_1(7) = \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ 4.999999543100626 \\ 4.99999997346104 \end{array} \right\} = 4.99999997346104, \quad x_1^0 = 7$$

$$\varphi_1(8) = \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ 4.999999543100626 \\ 4.99999997346104 \\ 4.999999998489946 \end{array} \right\} = 4.999999998489946, \quad x_1^0 = 8$$

$$\begin{aligned}
\varphi_1(9) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ 4.999999543100626 \\ 4.99999997346104 \\ 4.999999998489946 \\ 4.99999999915422 \end{array} \right\} = 4.99999999915422, \quad x_1^0 = 9 \\
\varphi_1(10) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ 4.999999543100626 \\ 4.99999997346104 \\ 4.999999998489946 \\ 4.99999999915422 \\ 4.9999999999532 \end{array} \right\} = 4.9999999999532, \quad x_1^0 = 10 \\
\varphi_1(11) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 4.99999997346104 \\ 4.999999998489946 \\ 4.99999999915422 \\ 4.9999999999532 \\ 4.9999999999743 \end{array} \right\} = 4.9999999999743, \quad x_1^0 = 11 \\
\varphi_1(12) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 4.999999998489946 \\ 4.99999999915422 \\ 4.9999999999532 \\ 4.9999999999743 \\ 4.9999999999987 \end{array} \right\} = 4.9999999999987, \quad x_1^0 = 12
\end{aligned}$$

$$\begin{aligned}
\varphi_1(13) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 4.999999999915422 \\ 4.9999999999532 \\ 4.99999999999743 \\ 4.99999999999987 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(14) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 4.9999999999532 \\ 4.99999999999743 \\ 4.99999999999987 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(15) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 4.99999999999743 \\ 4.99999999999987 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(16) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 4.99999999999987 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13
\end{aligned}$$

$$\begin{aligned}
\varphi_1(17) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(18) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(19) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(20) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13
\end{aligned}$$

$$\begin{aligned}
\varphi_1(21) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(22) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(23) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(24) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13
\end{aligned}$$

$$\begin{aligned}
\varphi_1(25) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(26) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(27) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(28) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13
\end{aligned}$$

$$\begin{aligned}
\varphi_1(29) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(30) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(31) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(32) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13
\end{aligned}$$

$$\begin{aligned}
\varphi_1(33) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(34) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(35) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13 \\
\varphi_1(36) &= \max \left\{ \begin{array}{c} 4.75106465816068 \\ 4.975243199295103 \\ 4.998149081378998 \\ 4.999877116885469 \\ 4.999992352446667 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 13
\end{aligned}$$



## 2 Product 2

$$\varphi_2(1) = \max \{ 3.926737444445063 \} = 3.926737444445063, \quad x_2^0 = 1$$

$$\varphi_2(2) = \max \left\{ \begin{array}{c} 8.677802102605742 \\ 3.997316749117479 \end{array} \right\} = 8.677802102605742, \quad x_2^0 = 1$$

$$\varphi_2(3) = \max \left\{ \begin{array}{c} 8.901980643740167 \\ 8.74838140727816 \\ 3.9999262699047753 \end{array} \right\} = 8.901980643740167, \quad x_2^0 = 1$$

$$\varphi_2(4) = \max \left\{ \begin{array}{c} 8.92488652582406 \\ 8.97255994841258 \\ 8.750990928065455 \\ 3.999998199437508 \end{array} \right\} = 8.97255994841258, \quad x_2^0 = 2$$

$$\varphi_2(5) = \max \left\{ \begin{array}{c} 8.926614561330531 \\ 8.995465830496478 \\ 8.975169469199878 \\ 8.751062857598189 \\ 3.9999999587769284 \end{array} \right\} = 8.995465830496478, \quad x_2^0 = 2$$

$$\varphi_2(6) = \max \left\{ \begin{array}{c} 8.926729796891731 \\ 8.997193866002949 \\ 8.998075351283774 \\ 8.97524139873261 \\ 8.751064616937608 \\ 3.9999999990939674 \end{array} \right\} = 8.998075351283774, \quad x_2^0 = 3$$

$$\varphi_2(7) = \max \left\{ \begin{array}{c} 8.926736987545688 \\ 8.997309101564145 \\ 8.999803386790244 \\ 8.998147280816507 \\ 8.97524315807203 \\ 8.751064657254648 \\ 3.999999999806395 \end{array} \right\} = 8.999803386790244, \quad x_2^0 = 3$$

$$\varphi_2(8) = \max \left\{ \begin{array}{c} 8.926737417906104 \\ 8.997316292218105 \\ 8.999918622351442 \\ 8.999875316322978 \\ 8.998149040155926 \\ 8.97524319838907 \\ 8.75106465814132 \\ 3.99999999999595 \end{array} \right\} = 8.999918622351442, \quad x_2^0 = 3$$

$$\begin{aligned}
\varphi_2(9) &= \max \left\{ \begin{array}{c} 8.926737442935009 \\ 8.997316722578518 \\ 8.999925813005401 \\ 8.999990551884174 \\ 8.999877075662397 \\ 8.998149080472967 \\ 8.975243199275742 \\ 8.751064658160274 \\ 3.999999999999992 \end{array} \right\} = 8.999990551884174, \quad x_2^0 = 4 \\
\varphi_2(10) &= \max \left\{ \begin{array}{c} 8.926737444360485 \\ 8.997316747607425 \\ 8.999926243365815 \\ 8.999997742538135 \\ 8.999992311223595 \\ 8.999877115979437 \\ 8.998149081359639 \\ 8.975243199294699 \\ 8.751064658160672 \\ 4.0 \end{array} \right\} = 8.999997742538135, \quad x_2^0 = 4 \\
\varphi_2(11) &= \max \left\{ \begin{array}{c} 8.926737444440384 \\ 8.997316749032901 \\ 8.99992626839472 \\ 8.999998172898547 \\ 8.999999501877554 \\ \dots\dots\dots \\ 8.99987711686611 \\ 8.998149081378592 \\ 8.975243199295095 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 8.999999501877554, \quad x_2^0 = 5 \\
\varphi_2(12) &= \max \left\{ \begin{array}{c} 8.926737444444807 \\ 8.997316749112798 \\ 8.999926269820197 \\ 8.999998197927454 \\ 8.999999932237968 \\ \dots\dots\dots \\ 8.999877116885063 \\ 8.99814908137899 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 8.999999932237968, \quad x_2^0 = 5
\end{aligned}$$

$$\begin{aligned}
\varphi_2(13) &= \max \left\{ \begin{array}{c} 8.926737444445049 \\ 8.997316749117221 \\ 8.999926269900095 \\ 8.99999819935293 \\ 8.999999957266875 \\ \dots\dots\dots \\ 8.999877116885461 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 8.999999972555006, \quad x_2^0 = 6 \\
\varphi_2(14) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117466 \\ 8.999926269904519 \\ 8.999998199432827 \\ 8.999999958692351 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 8.999999997583913, \quad x_2^0 = 6 \\
\varphi_2(15) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904762 \\ 8.99999819943725 \\ 8.999999958772248 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 8.99999999900939, \quad x_2^0 = 6 \\
\varphi_2(16) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437496 \\ 8.999999958776671 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 8.999999999896062, \quad x_2^0 = 7
\end{aligned}$$

$$\begin{aligned}
\varphi_2(17) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776915 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 8.99999999975959, \quad x_2^0 = 7 \\
\varphi_2(18) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 8.99999999994916, \quad x_2^0 = 8 \\
\varphi_2(19) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 8.9999999999934, \quad x_2^0 = 8 \\
\varphi_2(20) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 8.99999999999735, \quad x_2^0 = 9
\end{aligned}$$

$$\begin{aligned}
\varphi_2(21) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 8.999999999999979, \quad x_2^0 = 9 \\
\varphi_2(22) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 8.999999999999993, \quad x_2^0 = 9 \\
\varphi_2(23) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 9.0, \quad x_2^0 = 10 \\
\varphi_2(24) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 9.0, \quad x_2^0 = 10
\end{aligned}$$

$$\begin{aligned}
\varphi_2(25) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 9.0, \quad x_2^0 = 10 \\
\varphi_2(26) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 9.0, \quad x_2^0 = 10 \\
\varphi_2(27) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 9.0, \quad x_2^0 = 10 \\
\varphi_2(28) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 9.0, \quad x_2^0 = 10
\end{aligned}$$

$$\begin{aligned}
\varphi_2(29) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 9.0, \quad x_2^0 = 10 \\
\varphi_2(30) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 9.0, \quad x_2^0 = 10 \\
\varphi_2(31) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 9.0, \quad x_2^0 = 10 \\
\varphi_2(32) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 9.0, \quad x_2^0 = 10
\end{aligned}$$

$$\begin{aligned}
\varphi_2(33) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 9.0, \quad x_2^0 = 10 \\
\varphi_2(34) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 9.0, \quad x_2^0 = 10 \\
\varphi_2(35) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 9.0, \quad x_2^0 = 10 \\
\varphi_2(36) &= \max \left\{ \begin{array}{c} 8.926737444445063 \\ 8.997316749117479 \\ 8.999926269904776 \\ 8.999998199437508 \\ 8.999999958776929 \\ \dots\dots\dots \\ 8.999877116885468 \\ 8.998149081378997 \\ 8.975243199295104 \\ 8.75106465816068 \\ 4.0 \end{array} \right\} = 9.0, \quad x_2^0 = 10
\end{aligned}$$



### 3 Product 3

$$\begin{aligned}
\varphi_3(1) &= \max \{ 9.95913228561536 \} = 9.95913228561536, \quad x_3^0 = 1 \\
\varphi_3(2) &= \max \left\{ \begin{array}{c} 13.885869730060422 \\ 9.999665968773662 \end{array} \right\} = 13.885869730060422, \quad x_3^0 = 1 \\
\varphi_3(3) &= \max \left\{ \begin{array}{c} 18.6369343882211 \\ 13.926403413218726 \\ 9.999997952319129 \end{array} \right\} = 18.6369343882211, \quad x_3^0 = 1 \\
\varphi_3(4) &= \max \left\{ \begin{array}{c} 18.861112929355528 \\ 18.677468071379405 \\ 13.926735396764192 \\ 9.9999998884213 \end{array} \right\} = 18.861112929355528, \quad x_3^0 = 1 \\
\varphi_3(5) &= \max \left\{ \begin{array}{c} 18.931692234027942 \\ 18.90164661251383 \\ 18.677800054924873 \\ 13.926737433287194 \\ 9.999999999943 \end{array} \right\} = 18.931692234027942, \quad x_3^0 = 1 \\
\varphi_3(6) &= \max \left\{ \begin{array}{c} 18.95459811611184 \\ 18.972225917186243 \\ 18.901978596059294 \\ 18.677802091447873 \\ 13.926737444388063 \\ 9.9999999999972 \end{array} \right\} = 18.972225917186243, \quad x_3^0 = 2 \\
\varphi_3(7) &= \max \left\{ \begin{array}{c} 18.957207636899135 \\ 18.99513179927014 \\ 18.972557900731708 \\ 18.901980632582298 \\ 18.677802102548743 \\ 13.926737444444782 \\ 10.0 \end{array} \right\} = 18.99513179927014, \quad x_3^0 = 2 \\
\varphi_3(8) &= \max \left\{ \begin{array}{c} 18.9589356724056 \\ 18.997741320057436 \\ 18.995463782815605 \\ 18.97255993725471 \\ 18.901980643683167 \\ 18.67780210260546 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.997741320057436, \quad x_3^0 = 2
\end{aligned}$$

$$\begin{aligned}
\varphi_3(9) &= \max \left\{ \begin{array}{c} 18.9590509079668 \\ 18.999469355563907 \\ 18.9980733036029 \\ 18.99546581933861 \\ 18.97255994835558 \\ 18.901980643739886 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.999469355563907, \quad x_3^0 = 2 \\
\varphi_3(10) &= \max \left\{ \begin{array}{c} 18.959122837499535 \\ 18.999584591125107 \\ 18.999801339109375 \\ 18.998075340125904 \\ 18.99546583043948 \\ 18.9725599484123 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.999801339109375, \quad x_3^0 = 3 \\
\varphi_3(11) &= \max \left\{ \begin{array}{c} 18.959130028153496 \\ 18.999656520657837 \\ 18.99991657467057 \\ 18.999803375632375 \\ 18.998075351226774 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.99991657467057, \quad x_3^0 = 3 \\
\varphi_3(12) &= \max \left\{ \begin{array}{c} 18.959131787492915 \\ 18.999663711311797 \\ 18.9999885042033 \\ 18.99991861119357 \\ 18.999803386733245 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.9999885042033, \quad x_3^0 = 3
\end{aligned}$$

$$\begin{aligned}
\varphi_3(13) &= \max \left\{ \begin{array}{c} 18.959132217853327 \\ 18.999665470651216 \\ 18.99999569485726 \\ 18.999990540726305 \\ 18.999918622294445 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.99999569485726, \quad x_3^0 = 3 \\
\varphi_3(14) &= \max \left\{ \begin{array}{c} 18.959132258170364 \\ 18.99966590101163 \\ 18.99999745419668 \\ 18.999997731380265 \\ 18.999990551827175 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.999997731380265, \quad x_3^0 = 4 \\
\varphi_3(15) &= \max \left\{ \begin{array}{c} 18.959132283199274 \\ 18.99966594132867 \\ 18.999997884557096 \\ 18.999999490719684 \\ 18.999997742481135 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.999999490719684, \quad x_3^0 = 4 \\
\varphi_3(16) &= \max \left\{ \begin{array}{c} 18.95913228462475 \\ 18.999665966357576 \\ 18.999997924874137 \\ 18.99999921080096 \\ 18.999999501820554 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.99999921080096, \quad x_3^0 = 4
\end{aligned}$$

$$\begin{aligned}
\varphi_3(17) &= \max \left\{ \begin{array}{c} 18.959132285511423 \\ 18.999665967783052 \\ 18.99999794990304 \\ 18.999999961397137 \\ 18.99999993218097 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.999999961397137, \quad x_3^0 = 4 \\
\varphi_3(18) &= \max \left\{ \begin{array}{c} 18.959132285591316 \\ 18.999665968669724 \\ 18.999997951328517 \\ 18.999999986426044 \\ 18.999999972498006 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.999999986426044, \quad x_3^0 = 4 \\
\varphi_3(19) &= \max \left\{ \begin{array}{c} 18.959132285610274 \\ 18.99966596874962 \\ 18.99999795221519 \\ 18.99999998785152 \\ 18.99999997526913 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.99999997526913, \quad x_3^0 = 5 \\
\varphi_3(20) &= \max \left\{ \begin{array}{c} 18.9591322856147 \\ 18.99966596876858 \\ 18.99999795229509 \\ 18.999999988738193 \\ 18.9999999895239 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.9999999895239, \quad x_3^0 = 5
\end{aligned}$$

$$\begin{aligned}
\varphi_3(21) &= \max \left\{ \begin{array}{c} 18.959132285615095 \\ 18.999665968773 \\ 18.999997952314047 \\ 18.99999998881809 \\ 18.99999999839062 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.99999999839062, \quad x_3^0 = 5 \\
\varphi_3(22) &= \max \left\{ \begin{array}{c} 18.95913228561534 \\ 18.9996659687734 \\ 18.999997952318466 \\ 18.999999988837047 \\ 18.9999999991896 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.9999999991896, \quad x_3^0 = 5 \\
\varphi_3(23) &= \max \left\{ \begin{array}{c} 18.959132285615354 \\ 18.99966596877364 \\ 18.999997952318864 \\ 18.99999998884147 \\ 18.99999999937916 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.99999999975678, \quad x_3^0 = 6 \\
\varphi_3(24) &= \max \left\{ \begin{array}{c} 18.95913228561536 \\ 18.999665968773655 \\ 18.999997952319106 \\ 18.999999988841864 \\ 18.9999999994234 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.9999999994635, \quad x_3^0 = 6
\end{aligned}$$

$$\begin{aligned}
\varphi_3(25) &= \max \left\{ \begin{array}{c} 18.95913228561536 \\ 18.999665968773662 \\ 18.99999795231912 \\ 18.9999998884211 \\ 18.99999999942737 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.9999999999906, \quad x_3^0 = 6 \\
\varphi_3(26) &= \max \left\{ \begin{array}{c} 18.95913228561536 \\ 18.999665968773662 \\ 18.999997952319127 \\ 18.99999988842124 \\ 18.9999999994298 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.99999999999453, \quad x_3^0 = 6 \\
\varphi_3(27) &= \max \left\{ \begin{array}{c} 18.95913228561536 \\ 18.999665968773662 \\ 18.999997952319127 \\ 18.9999998884213 \\ 18.99999999942993 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.99999999999737, \quad x_3^0 = 7 \\
\varphi_3(28) &= \max \left\{ \begin{array}{c} 18.95913228561536 \\ 18.999665968773662 \\ 18.999997952319127 \\ 18.9999998884213 \\ 18.99999999943 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.9999999999998, \quad x_3^0 = 7
\end{aligned}$$

$$\begin{aligned}
\varphi_3(29) &= \max \left\{ \begin{array}{c} 18.95913228561536 \\ 18.999665968773662 \\ 18.999997952319127 \\ 18.99999998884213 \\ 18.999999999943 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 18.999999999999993, \quad x_3^0 = 7 \\
\varphi_3(30) &= \max \left\{ \begin{array}{c} 18.95913228561536 \\ 18.999665968773662 \\ 18.999997952319127 \\ 18.99999998884213 \\ 18.999999999943 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 19.0, \quad x_3^0 = 7 \\
\varphi_3(31) &= \max \left\{ \begin{array}{c} 18.95913228561536 \\ 18.999665968773662 \\ 18.999997952319127 \\ 18.99999998884213 \\ 18.999999999943 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 19.0, \quad x_3^0 = 7 \\
\varphi_3(32) &= \max \left\{ \begin{array}{c} 18.95913228561536 \\ 18.999665968773662 \\ 18.999997952319127 \\ 18.99999998884213 \\ 18.999999999943 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 19.0, \quad x_3^0 = 7
\end{aligned}$$

$$\begin{aligned}
\varphi_3(33) &= \max \left\{ \begin{array}{c} 18.95913228561536 \\ 18.999665968773662 \\ 18.999997952319127 \\ 18.9999998884213 \\ 18.99999999943 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 19.0, \quad x_3^0 = 7 \\
\varphi_3(34) &= \max \left\{ \begin{array}{c} 18.95913228561536 \\ 18.999665968773662 \\ 18.999997952319127 \\ 18.9999998884213 \\ 18.99999999943 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 19.0, \quad x_3^0 = 7 \\
\varphi_3(35) &= \max \left\{ \begin{array}{c} 18.95913228561536 \\ 18.999665968773662 \\ 18.999997952319127 \\ 18.9999998884213 \\ 18.99999999943 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 19.0, \quad x_3^0 = 7 \\
\varphi_3(36) &= \max \left\{ \begin{array}{c} 18.95913228561536 \\ 18.999665968773662 \\ 18.999997952319127 \\ 18.9999998884213 \\ 18.99999999943 \\ \dots\dots\dots \\ 18.97255994841258 \\ 18.901980643740167 \\ 18.677802102605742 \\ 13.926737444445063 \\ 10.0 \end{array} \right\} = 19.0, \quad x_3^0 = 7
\end{aligned}$$



## 4 Product 4

$$\begin{aligned}
\varphi_4(1) &= \max \{ 7.601703453057088 \} = 7.601703453057088, \quad x_4^0 = 1 \\
\varphi_4(2) &= \max \left\{ \begin{array}{c} 17.56083573867245 \\ 7.960389118872165 \end{array} \right\} = 17.56083573867245, \quad x_4^0 = 1 \\
\varphi_4(3) &= \max \left\{ \begin{array}{c} 21.48757318311751 \\ 17.919521404487526 \\ 7.997038530206398 \end{array} \right\} = 21.48757318311751, \quad x_4^0 = 1 \\
\varphi_4(4) &= \max \left\{ \begin{array}{c} 26.238637841278187 \\ 21.846258848932585 \\ 17.956170815821757 \\ 7.99980338701675 \end{array} \right\} = 26.238637841278187, \quad x_4^0 = 1 \\
\varphi_4(5) &= \max \left\{ \begin{array}{c} 26.462816382412615 \\ 26.597323507093265 \\ 21.88290826026682 \\ 17.95893567263211 \\ 7.9999877639146675 \end{array} \right\} = 26.597323507093265, \quad x_4^0 = 2 \\
\varphi_4(6) &= \max \left\{ \begin{array}{c} 26.53339568708503 \\ 26.821502048227693 \\ 26.633972918427496 \\ 21.88567311707717 \\ 17.95912004953003 \\ 7.999999268961001 \end{array} \right\} = 26.821502048227693, \quad x_4^0 = 2 \\
\varphi_4(7) &= \max \left\{ \begin{array}{c} 26.57392937024333 \\ 26.892081352900107 \\ 26.858151459561924 \\ 26.63673777523785 \\ 21.885857493975088 \\ 17.95913155457636 \\ 7.999999957537663 \end{array} \right\} = 26.892081352900107, \quad x_4^0 = 2 \\
\varphi_4(8) &= \max \left\{ \begin{array}{c} 26.596835252327228 \\ 26.932615036058408 \\ 26.928730764234338 \\ 26.86091631637228 \\ 26.636922152135767 \\ 21.885868999021422 \\ 17.95913224315302 \\ 7.999999997583913 \end{array} \right\} = 26.932615036058408, \quad x_4^0 = 2
\end{aligned}$$

$$\begin{aligned}
\varphi_4(9) &= \max \left\{ \begin{array}{l} 26.599444773114524 \\ 26.955520918142305 \\ 26.96926444739264 \\ 26.931495621044693 \\ 26.861100693270195 \\ 26.6369336571821 \\ 21.885869687598085 \\ 17.959132283199274 \\ 7.999999999864676 \end{array} \right\} = 26.96926444739264, \quad x_4^0 = 3 \\
\varphi_4(10) &= \max \left\{ \begin{array}{l} 26.601172808620994 \\ 26.9581304389296 \\ 26.992170329476536 \\ 26.972029304202994 \\ 26.93167999794261 \\ 26.86111219831653 \\ 26.636934345758764 \\ 21.885869727644334 \\ 17.959132285480035 \\ 7.99999999992513 \end{array} \right\} = 26.992170329476536, \quad x_4^0 = 3 \\
\varphi_4(11) &= \max \left\{ \begin{array}{l} 26.601504792166462 \\ 26.95985847443607 \\ 26.994779850263832 \\ 26.99493518628689 \\ 26.97221368110091 \\ \dots\dots\dots \\ 26.861112886893192 \\ 26.636934385805013 \\ 21.885869729925098 \\ 17.959132285607872 \\ 7.9999999999959 \end{array} \right\} = 26.99493518628689, \quad x_4^0 = 4 \\
\varphi_4(12) &= \max \left\{ \begin{array}{l} 26.60162002772766 \\ 26.96019045798154 \\ 26.996507885770306 \\ 26.997544707074187 \\ 26.995119563184808 \\ \dots\dots\dots \\ 26.86111292693944 \\ 26.636934388085777 \\ 21.885869730052935 \\ 17.95913228561495 \\ 7.9999999999979 \end{array} \right\} = 26.997544707074187, \quad x_4^0 = 4
\end{aligned}$$

$$\begin{aligned}
\varphi_4(13) &= \max \left\{ \begin{array}{c} 26.60169195726039 \\ 26.960305693542736 \\ 26.99683986931577 \\ 26.999272742580658 \\ 26.997729083972104 \\ \dots\dots\dots \\ 26.861112929220205 \\ 26.63693438821361 \\ 21.885869730060012 \\ 17.95913228561534 \\ 8.0 \end{array} \right\} = 26.999272742580658, \quad x_4^0 = 4 \\
\varphi_4(14) &= \max \left\{ \begin{array}{c} 26.60169914791435 \\ 26.960377623075466 \\ 26.996955104876967 \\ 26.999604726126126 \\ 26.999457119478574 \\ \dots\dots\dots \\ 26.86111292934804 \\ 26.636934388220688 \\ 21.8858697300604 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.999604726126126, \quad x_4^0 = 4 \\
\varphi_4(15) &= \max \left\{ \begin{array}{c} 26.601701184437353 \\ 26.960384813729426 \\ 26.997027034409697 \\ 26.999719961687322 \\ 26.999789103024042 \\ \dots\dots\dots \\ 26.861112929355116 \\ 26.63693438822108 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.999789103024042, \quad x_4^0 = 5 \\
\varphi_4(16) &= \max \left\{ \begin{array}{c} 26.601702943776772 \\ 26.96038685025243 \\ 26.997034225063658 \\ 26.999791891220053 \\ 26.99990433858524 \\ \dots\dots\dots \\ 26.861112929355507 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.99990433858524, \quad x_4^0 = 5
\end{aligned}$$

$$\begin{aligned}
\varphi_4(17) &= \max \left\{ \begin{array}{c} 26.601703374137184 \\ 26.96038860959185 \\ 26.997036261586665 \\ 26.999799081874013 \\ 26.99997626811797 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.99997626811797, \quad x_4^0 = 5 \\
\varphi_4(18) &= \max \left\{ \begin{array}{c} 26.601703414454224 \\ 26.96038903995226 \\ 26.997038020926084 \\ 26.999801118397016 \\ 26.99998345877193 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.999987773164303, \quad x_4^0 = 6 \\
\varphi_4(19) &= \max \left\{ \begin{array}{c} 26.60170343948313 \\ 26.9603890802693 \\ 26.997038451286492 \\ 26.999802877736435 \\ 26.999985495294933 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.999994963818263, \quad x_4^0 = 6 \\
\varphi_4(20) &= \max \left\{ \begin{array}{c} 26.601703450584 \\ 26.96038910529821 \\ 26.997038491603533 \\ 26.999803308096848 \\ 26.999987254634352 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.999997000341267, \quad x_4^0 = 6
\end{aligned}$$

$$\begin{aligned}
\varphi_4(21) &= \max \left\{ \begin{array}{c} 26.601703452009478 \\ 26.960389116399078 \\ 26.997038516632443 \\ 26.999803348413888 \\ 26.999987684994764 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.999998759680686, \quad x_4^0 = 6 \\
\varphi_4(22) &= \max \left\{ \begin{array}{c} 26.60170345289615 \\ 26.960389117824555 \\ 26.99703852773331 \\ 26.999803373442795 \\ 26.999987725311804 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.99999944825735, \quad x_4^0 = 7 \\
\varphi_4(23) &= \max \left\{ \begin{array}{c} 26.601703452976047 \\ 26.960389118711227 \\ 26.997038529158786 \\ 26.999803384543664 \\ 26.99998775034071 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.9999987861776, \quad x_4^0 = 7 \\
\varphi_4(24) &= \max \left\{ \begin{array}{c} 26.601703453032766 \\ 26.960389118791124 \\ 26.997038530045458 \\ 26.99980338596914 \\ 26.99998776144158 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.9999999189348, \quad x_4^0 = 7
\end{aligned}$$

$$\begin{aligned}
\varphi_4(25) &= \max \left\{ \begin{array}{c} 26.601703453051723 \\ 26.960389118847843 \\ 26.99703853012536 \\ 26.999803386855813 \\ 26.999987762867057 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.99999995898105, \quad x_4^0 = 8 \\
\varphi_4(26) &= \max \left\{ \begin{array}{c} 26.601703453056146 \\ 26.9603891188668 \\ 26.997038530182074 \\ 26.99980338693571 \\ 26.99998776375373 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.999999984009957, \quad x_4^0 = 8 \\
\varphi_4(27) &= \max \left\{ \begin{array}{c} 26.60170345305654 \\ 26.960389118871223 \\ 26.99703853020103 \\ 26.99980338699243 \\ 26.999987763833627 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.99999995110826, \quad x_4^0 = 8 \\
\varphi_4(28) &= \max \left\{ \begin{array}{c} 26.601703453056825 \\ 26.960389118871618 \\ 26.997038530205458 \\ 26.999803387011386 \\ 26.999987763890346 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.9999999739159, \quad x_4^0 = 9
\end{aligned}$$

$$\begin{aligned}
\varphi_4(29) &= \max \left\{ \begin{array}{c} 26.601703453057066 \\ 26.960389118871902 \\ 26.99703853020585 \\ 26.99980338701581 \\ 26.999987763909303 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.999999998817067, \quad x_4^0 = 9 \\
\varphi_4(30) &= \max \left\{ \begin{array}{c} 26.60170345305708 \\ 26.960389118872143 \\ 26.997038530206133 \\ 26.999803387016204 \\ 26.999987763913726 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.9999999970374, \quad x_4^0 = 9 \\
\varphi_4(31) &= \max \left\{ \begin{array}{c} 26.601703453057088 \\ 26.960389118872158 \\ 26.997038530206375 \\ 26.999803387016488 \\ 26.99998776391412 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.99999999831573, \quad x_4^0 = 10 \\
\varphi_4(32) &= \max \left\{ \begin{array}{c} 26.601703453057088 \\ 26.960389118872165 \\ 26.99703853020639 \\ 26.99980338701673 \\ 26.999987763914405 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.99999999911473, \quad x_4^0 = 10
\end{aligned}$$

$$\begin{aligned}
\varphi_4(33) &= \max \left\{ \begin{array}{c} 26.601703453057088 \\ 26.960389118872165 \\ 26.997038530206396 \\ 26.999803387016744 \\ 26.999987763914646 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.99999999996819, \quad x_4^0 = 10 \\
\varphi_4(34) &= \max \left\{ \begin{array}{c} 26.601703453057088 \\ 26.960389118872165 \\ 26.997038530206396 \\ 26.99980338701675 \\ 26.99998776391466 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.999999999987146, \quad x_4^0 = 10 \\
\varphi_4(35) &= \max \left\{ \begin{array}{c} 26.601703453057088 \\ 26.960389118872165 \\ 26.997038530206396 \\ 26.99980338701675 \\ 26.999987763914667 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.99999999994223, \quad x_4^0 = 11 \\
\varphi_4(36) &= \max \left\{ \begin{array}{c} 26.601703453057088 \\ 26.960389118872165 \\ 26.997038530206396 \\ 26.99980338701675 \\ 26.999987763914667 \\ \dots\dots\dots \\ 26.861112929355528 \\ 26.6369343882211 \\ 21.88586973006042 \\ 17.95913228561536 \\ 8.0 \end{array} \right\} = 26.99999999999865, \quad x_4^0 = 11
\end{aligned}$$



## 5 Product 5

$$\begin{aligned}
\varphi_5(1) &= \max \{ 2.966673010385273 \} = 2.966673010385273, \quad x_5^0 = 1 \\
\varphi_5(2) &= \max \left\{ \begin{array}{c} 10.568376463442362 \\ 2.9992595868654193 \end{array} \right\} = 10.568376463442362, \quad x_5^0 = 1 \\
\varphi_5(3) &= \max \left\{ \begin{array}{c} 20.527508749057723 \\ 10.600963039922508 \\ 2.9999876613851386 \end{array} \right\} = 20.527508749057723, \quad x_5^0 = 1 \\
\varphi_5(4) &= \max \left\{ \begin{array}{c} 24.454246193502783 \\ 20.56009532553787 \\ 10.601691114442227 \\ 2.999999817240248 \end{array} \right\} = 24.454246193502783, \quad x_5^0 = 1 \\
\varphi_5(5) &= \max \left\{ \begin{array}{c} 29.205310851663462 \\ 24.486832769982932 \\ 20.560823400057586 \\ 10.601703270297335 \\ 2.999999974621536 \end{array} \right\} = 29.205310851663462, \quad x_5^0 = 1 \\
\varphi_5(6) &= \max \left\{ \begin{array}{c} 29.563996517478536 \\ 29.237897428143608 \\ 24.48756084450265 \\ 20.560835555912696 \\ 10.601703450519242 \\ 2.999999999661693 \end{array} \right\} = 29.563996517478536, \quad x_5^0 = 1 \\
\varphi_5(7) &= \max \left\{ \begin{array}{c} 29.788175058612964 \\ 29.596583093958685 \\ 29.238625502663325 \\ 24.48757300035776 \\ 20.560835736134603 \\ 10.601703453023259 \\ 2.99999999995617 \end{array} \right\} = 29.788175058612964, \quad x_5^0 = 1 \\
\varphi_5(8) &= \max \left\{ \begin{array}{c} 29.858754363285378 \\ 29.820761635093113 \\ 29.597311168478402 \\ 29.238637658518435 \\ 24.487573180579666 \\ 20.560835738638616 \\ 10.60170345305665 \\ 2.99999999999947 \end{array} \right\} = 29.858754363285378, \quad x_5^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_5(9) &= \max \left\{ \begin{array}{c} 29.89928804644368 \\ 29.891340939765527 \\ 29.82148970961283 \\ 29.597323324333512 \\ 29.238637838740342 \\ 24.487573183083683 \\ 20.56083573867201 \\ 10.601703453057084 \\ 3.0 \end{array} \right\} = 29.89928804644368, \quad x_5^0 = 1 \\
\varphi_5(10) &= \max \left\{ \begin{array}{c} 29.93593745777791 \\ 29.93187462292383 \\ 29.892069014285244 \\ 29.82150186546794 \\ 29.59732350455542 \\ 29.238637841244355 \\ 24.487573183117075 \\ 20.560835738672445 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.93593745777791, \quad x_5^0 = 1 \\
\varphi_5(11) &= \max \left\{ \begin{array}{c} 29.958843339861808 \\ 29.96852403425806 \\ 29.932602697443546 \\ 29.892081170140354 \\ 29.821502045689847 \\ \dots\dots\dots \\ 29.23863784127775 \\ 24.487573183117505 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.96852403425806, \quad x_5^0 = 2 \\
\varphi_5(12) &= \max \left\{ \begin{array}{c} 29.961608196672167 \\ 29.991429916341957 \\ 29.969252108777777 \\ 29.932614853298656 \\ 29.89208135036226 \\ \dots\dots\dots \\ 29.238637841278184 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.991429916341957, \quad x_5^0 = 2
\end{aligned}$$

$$\begin{aligned}
\varphi_5(13) &= \max \left\{ \begin{array}{c} 29.964217717459462 \\ 29.994194773152312 \\ 29.992157990861674 \\ 29.969264264632887 \\ 29.932615033520563 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.994194773152312, \quad x_5^0 = 2 \\
\varphi_5(14) &= \max \left\{ \begin{array}{c} 29.96594575296593 \\ 29.996804293939608 \\ 29.99492284767203 \\ 29.992170146716784 \\ 29.969264444854794 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.996804293939608, \quad x_5^0 = 2 \\
\varphi_5(15) &= \max \left\{ \begin{array}{c} 29.9662777365114 \\ 29.99853232944608 \\ 29.997532368459325 \\ 29.99493500352714 \\ 29.99217032693869 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.99853232944608, \quad x_5^0 = 2 \\
\varphi_5(16) &= \max \left\{ \begin{array}{c} 29.966462113409314 \\ 29.998864312991547 \\ 29.999260403965796 \\ 29.997544524314435 \\ 29.994935183749046 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.999260403965796, \quad x_5^0 = 3
\end{aligned}$$

$$\begin{aligned}
\varphi_5(17) &= \max \left\{ \begin{array}{c} 29.96657734897051 \\ 29.999048689889463 \\ 29.999592387511264 \\ 29.999272559820906 \\ 29.99754470453634 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.999592387511264, \quad x_5^0 = 3 \\
\varphi_5(18) &= \max \left\{ \begin{array}{c} 29.96664927850324 \\ 29.99916392545066 \\ 29.99977676440918 \\ 29.999604543366374 \\ 29.999272740042812 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.99977676440918, \quad x_5^0 = 3 \\
\varphi_5(19) &= \max \left\{ \begin{array}{c} 29.966660783549578 \\ 29.99923585498339 \\ 29.999891999970377 \\ 29.99978892026429 \\ 29.99960472358828 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.999891999970377, \quad x_5^0 = 3 \\
\varphi_5(20) &= \max \left\{ \begin{array}{c} 29.96666797420354 \\ 29.999247360029724 \\ 29.999963929503107 \\ 29.999904155825487 \\ 29.999789100486197 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.999963929503107, \quad x_5^0 = 3
\end{aligned}$$

$$\begin{aligned}
\varphi_5(21) &= \max \left\{ \begin{array}{c} 29.96667001072654 \\ 29.999254550683684 \\ 29.99997543454944 \\ 29.999976085358217 \\ 29.999904336047393 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.999976085358217, \quad x_5^0 = 4 \\
\varphi_5(22) &= \max \left\{ \begin{array}{c} 29.966671770065958 \\ 29.999256587206688 \\ 29.9999826252034 \\ 29.99998759040455 \\ 29.999976265580123 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.99998759040455, \quad x_5^0 = 4 \\
\varphi_5(23) &= \max \left\{ \begin{array}{c} 29.96667245864262 \\ 29.999258346546107 \\ 29.999984661726405 \\ 29.99999478105851 \\ 29.999987770626458 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.99999478105851, \quad x_5^0 = 4 \\
\varphi_5(24) &= \max \left\{ \begin{array}{c} 29.966672889003036 \\ 29.99925903512277 \\ 29.999986421065824 \\ 29.999996817581515 \\ 29.999994961280418 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.999996817581515, \quad x_5^0 = 4
\end{aligned}$$

$$\begin{aligned}
\varphi_5(25) &= \max \left\{ \begin{array}{c} 29.966672929320076 \\ 29.99925946548318 \\ 29.999987109642486 \\ 29.999998576920934 \\ 29.99999699780342 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.999998576920934, \quad x_5^0 = 4 \\
\varphi_5(26) &= \max \left\{ \begin{array}{c} 29.96667296936632 \\ 29.99925950580022 \\ 29.9999875400029 \\ 29.999999265497596 \\ 29.99999875714284 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.999999265497596, \quad x_5^0 = 4 \\
\varphi_5(27) &= \max \left\{ \begin{array}{c} 29.966672994395232 \\ 29.99925954584647 \\ 29.99998758031994 \\ 29.99999969585801 \\ 29.999999445719503 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.99999969585801, \quad x_5^0 = 4 \\
\varphi_5(28) &= \max \left\{ \begin{array}{c} 29.966673005496098 \\ 29.999259570875378 \\ 29.999987620366188 \\ 29.99999973617505 \\ 29.999999876079915 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.999999876079915, \quad x_5^0 = 5
\end{aligned}$$

$$\begin{aligned}
\varphi_5(29) &= \max \left\{ \begin{array}{c} 29.966673007776862 \\ 29.999259581976247 \\ 29.999987645395095 \\ 29.999999776221298 \\ 29.999999916396956 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.999999916396956, \quad x_5^0 = 5 \\
\varphi_5(30) &= \max \left\{ \begin{array}{c} 29.96667300920234 \\ 29.99925958425701 \\ 29.999987656495964 \\ 29.999999801250205 \\ 29.999999956443204 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.999999956443204, \quad x_5^0 = 5 \\
\varphi_5(31) &= \max \left\{ \begin{array}{c} 29.96667301008901 \\ 29.999259585682488 \\ 29.99998765877673 \\ 29.999999812351074 \\ 29.99999998147211 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.99999998147211, \quad x_5^0 = 5 \\
\varphi_5(32) &= \max \left\{ \begin{array}{c} 29.966673010216844 \\ 29.99925958656916 \\ 29.999987660202205 \\ 29.99999981463184 \\ 29.99999999257298 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.99999999257298, \quad x_5^0 = 5
\end{aligned}$$

$$\begin{aligned}
\varphi_5(33) &= \max \left\{ \begin{array}{c} 29.966673010296745 \\ 29.999259586696994 \\ 29.999987661088877 \\ 29.999999816057315 \\ 29.999999994853745 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.999999995076998, \quad x_5^0 = 6 \\
\varphi_5(34) &= \max \left\{ \begin{array}{c} 29.96667301035346 \\ 29.999259586776894 \\ 29.99998766121671 \\ 29.999999816943987 \\ 29.99999999627922 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.99999999735776, \quad x_5^0 = 6 \\
\varphi_5(35) &= \max \left\{ \begin{array}{c} 29.966673010372418 \\ 29.99925958683361 \\ 29.99998766129661 \\ 29.99999981707182 \\ 29.999999997165894 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.999999998783238, \quad x_5^0 = 6 \\
\varphi_5(36) &= \max \left\{ \begin{array}{c} 29.966673010379495 \\ 29.999259586852567 \\ 29.999987661353327 \\ 29.99999981715172 \\ 29.999999997293727 \\ \dots\dots\dots \\ 29.238637841278187 \\ 24.48757318311751 \\ 20.56083573867245 \\ 10.601703453057088 \\ 3.0 \end{array} \right\} = 29.99999999966991, \quad x_5^0 = 6
\end{aligned}$$



## 6 Product 6

$$\begin{aligned}
\varphi_6(1) &= \max \{ 6.425405009632708 \} = 6.425405009632708, \quad x_6^0 = 1 \\
\varphi_6(2) &= \max \left\{ \begin{array}{c} 9.392078020017982 \\ 6.905986541521141 \end{array} \right\} = 9.392078020017982, \quad x_6^0 = 1 \\
\varphi_6(3) &= \max \left\{ \begin{array}{c} 16.99378147307507 \\ 9.872659551906414 \\ 6.988391650991299 \end{array} \right\} = 16.99378147307507, \quad x_6^0 = 1 \\
\varphi_6(4) &= \max \left\{ \begin{array}{c} 26.952913758690432 \\ 17.474363004963504 \\ 9.955064661376571 \\ 6.998728888532482 \end{array} \right\} = 26.952913758690432, \quad x_6^0 = 1 \\
\varphi_6(5) &= \max \left\{ \begin{array}{c} 30.87965120313549 \\ 27.433495290578865 \\ 17.556768114433662 \\ 9.965401898917754 \\ 6.99986956811113 \end{array} \right\} = 30.87965120313549, \quad x_6^0 = 1 \\
\varphi_6(6) &= \max \left\{ \begin{array}{c} 35.63071586129617 \\ 31.360232735023924 \\ 27.515900400049023 \\ 17.567105351974845 \\ 9.966542578496403 \\ 6.999987152112365 \end{array} \right\} = 35.63071586129617, \quad x_6^0 = 1 \\
\varphi_6(7) &= \max \left\{ \begin{array}{c} 35.98940152711124 \\ 36.1112973931846 \\ 31.442637844494083 \\ 27.526237637590206 \\ 17.568246031553493 \\ 9.96666016249764 \\ 6.9999987696105075 \end{array} \right\} = 36.1112973931846, \quad x_6^0 = 2 \\
\varphi_6(8) &= \max \left\{ \begin{array}{c} 36.213580068245676 \\ 36.469983058999674 \\ 36.19370250265476 \\ 31.452975082035266 \\ 27.527378317168854 \\ 17.568363615554727 \\ 9.966671779995782 \\ 6.9999998845754 \end{array} \right\} = 36.469983058999674, \quad x_6^0 = 2
\end{aligned}$$

$$\begin{aligned}
\varphi_6(9) &= \max \left\{ \begin{array}{l} 36.28415937291808 \\ 36.69416160013411 \\ 36.55238816846983 \\ 36.204039740195945 \\ 31.454115761613913 \\ 27.527495901170088 \\ 17.56837523305287 \\ 9.966672894960674 \\ 6.9999999893410445 \end{array} \right\} = 36.69416160013411, \quad x_6^0 = 2 \\
\varphi_6(10) &= \max \left\{ \begin{array}{l} 36.324693056076384 \\ 36.764740904806516 \\ 36.77656670960426 \\ 36.56272540601102 \\ 36.20518041977459 \\ 31.454233345615147 \\ 27.52750751866823 \\ 17.568376348017765 \\ 9.966672999726317 \\ 6.99999999027848 \end{array} \right\} = 36.77656670960426, \quad x_6^0 = 3 \\
\varphi_6(11) &= \max \left\{ \begin{array}{l} 36.36134246741062 \\ 36.80527458796482 \\ 36.847146014276674 \\ 36.78690394714545 \\ 36.563866085589666 \\ \dots\dots\dots \\ 31.45424496311329 \\ 27.527508633633126 \\ 17.568376452783408 \\ 9.966673009413121 \\ 6.99999999912221 \end{array} \right\} = 36.847146014276674, \quad x_6^0 = 3 \\
\varphi_6(12) &= \max \left\{ \begin{array}{l} 36.393929043890765 \\ 36.841923999299055 \\ 36.887679697434976 \\ 36.85748325181786 \\ 36.788044626724094 \\ \dots\dots\dots \\ 31.454246078078185 \\ 27.52750873839877 \\ 17.568376462470212 \\ 9.966673010297495 \\ 6.9999999992138 \end{array} \right\} = 36.887679697434976, \quad x_6^0 = 3
\end{aligned}$$

$$\begin{aligned}
\varphi_6(13) &= \max \left\{ \begin{array}{c} 36.41683492597467 \\ 36.8745105757792 \\ 36.92432910876921 \\ 36.89801693497616 \\ 36.85862393139651 \\ \dots\dots\dots \\ 31.45424618284383 \\ 27.527508748085573 \\ 17.568376463354582 \\ 9.966673010377411 \\ 6.999999999999303 \end{array} \right\} = 36.92432910876921, \quad x_6^0 = 3 \\
\varphi_6(14) &= \max \left\{ \begin{array}{c} 36.41959978278502 \\ 36.8974164578631 \\ 36.956915685249356 \\ 36.934666346310394 \\ 36.89915761455481 \\ \dots\dots\dots \\ 31.454246192530633 \\ 27.527508748969943 \\ 17.5683764634345 \\ 9.966673010384575 \\ 6.99999999999934 \end{array} \right\} = 36.956915685249356, \quad x_6^0 = 3 \\
\varphi_6(15) &= \max \left\{ \begin{array}{c} 36.422209303572316 \\ 36.90018131467345 \\ 36.97982156733325 \\ 36.96725292279054 \\ 36.93580702588904 \\ \dots\dots\dots \\ 31.454246193415003 \\ 27.52750874904986 \\ 17.568376463441666 \\ 9.966673010385207 \\ 7.0 \end{array} \right\} = 36.97982156733325, \quad x_6^0 = 3 \\
\varphi_6(16) &= \max \left\{ \begin{array}{c} 36.42393733907879 \\ 36.90279083546075 \\ 36.98258642414361 \\ 36.99015880487444 \\ 36.96839360236919 \\ \dots\dots\dots \\ 31.45424619349492 \\ 27.527508749057027 \\ 17.5683764634423 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.99015880487444, \quad x_6^0 = 4
\end{aligned}$$

$$\begin{aligned}
\varphi_6(17) &= \max \left\{ \begin{array}{c} 36.424665413598504 \\ 36.90451887096722 \\ 36.98519594493091 \\ 36.99292366168479 \\ 36.99129948445309 \\ \dots\dots\dots \\ 31.454246193502087 \\ 27.52750874905766 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.99292366168479, \quad x_6^0 = 4 \\
\varphi_6(18) &= \max \left\{ \begin{array}{c} 36.42499739714397 \\ 36.90524694548694 \\ 36.986923980437375 \\ 36.99553318247209 \\ 36.99406434126344 \\ \dots\dots\dots \\ 31.45424619350272 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.99553318247209, \quad x_6^0 = 4 \\
\varphi_6(19) &= \max \left\{ \begin{array}{c} 36.42518177404189 \\ 36.9055789290324 \\ 36.987652054957096 \\ 36.99726121797856 \\ 36.99667386205074 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.99726121797856, \quad x_6^0 = 4 \\
\varphi_6(20) &= \max \left\{ \begin{array}{c} 36.425297009603085 \\ 36.90576330593032 \\ 36.98798403850256 \\ 36.997989292498275 \\ 36.99840189755721 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.99840189755721, \quad x_6^0 = 5
\end{aligned}$$

$$\begin{aligned}
\varphi_6(21) &= \max \left\{ \begin{array}{c} 36.425368939135815 \\ 36.90587854149152 \\ 36.98816841540048 \\ 36.99832127604375 \\ 36.99912997207693 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.99912997207693, \quad x_6^0 = 5 \\
\varphi_6(22) &= \max \left\{ \begin{array}{c} 36.425381094990925 \\ 36.90595047102425 \\ 36.98828365096168 \\ 36.99850565294166 \\ 36.999461955622394 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.999461955622394, \quad x_6^0 = 5 \\
\varphi_6(23) &= \max \left\{ \begin{array}{c} 36.425392600037256 \\ 36.90596262687936 \\ 36.98835558049441 \\ 36.998620888502856 \\ 36.999646332520314 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.999646332520314, \quad x_6^0 = 5 \\
\varphi_6(24) &= \max \left\{ \begin{array}{c} 36.425399790691216 \\ 36.90597413192569 \\ 36.98836773634952 \\ 36.998692818035586 \\ 36.99976156808151 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.999763916521545, \quad x_6^0 = 6
\end{aligned}$$

$$\begin{aligned}
\varphi_6(25) &= \max \left\{ \begin{array}{c} 36.42540182721422 \\ 36.90598132257965 \\ 36.98837924139585 \\ 36.998704973890696 \\ 36.99983349761423 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.99987915208274, \quad x_6^0 = 6 \\
\varphi_6(26) &= \max \left\{ \begin{array}{c} 36.42540358655364 \\ 36.905983359102656 \\ 36.98838643204981 \\ 36.998716478937034 \\ 36.99984565346935 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.99995108161547, \quad x_6^0 = 6 \\
\varphi_6(27) &= \max \left\{ \begin{array}{c} 36.425404275130305 \\ 36.905985118442075 \\ 36.988388468572815 \\ 36.998723669590994 \\ 36.99985715851568 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.99996323747058, \quad x_6^0 = 6 \\
\varphi_6(28) &= \max \left\{ \begin{array}{c} 36.42540470549072 \\ 36.90598580701874 \\ 36.988390227912234 \\ 36.998725706113994 \\ 36.99986434916964 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.99997485496873, \quad x_6^0 = 7
\end{aligned}$$

$$\begin{aligned}
\varphi_6(29) &= \max \left\{ \begin{array}{c} 36.425404885712624 \\ 36.90598623737915 \\ 36.988390916488896 \\ 36.99872746545341 \\ 36.99986638569264 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.99998636001506, \quad x_6^0 = 7 \\
\varphi_6(30) &= \max \left\{ \begin{array}{c} 36.425404926029664 \\ 36.905986417601056 \\ 36.988391346849305 \\ 36.998728154030076 \\ 36.99986814503207 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.99999355066902, \quad x_6^0 = 7 \\
\varphi_6(31) &= \max \left\{ \begin{array}{c} 36.42540496607592 \\ 36.9059864579181 \\ 36.988391527071215 \\ 36.99872858439049 \\ 36.99986883360873 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.999995587192025, \quad x_6^0 = 7 \\
\varphi_6(32) &= \max \left\{ \begin{array}{c} 36.42540499110482 \\ 36.90598649796435 \\ 36.988391567388256 \\ 36.998728764612395 \\ 36.99986926396914 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.999997346531444, \quad x_6^0 = 7
\end{aligned}$$

$$\begin{aligned}
\varphi_6(33) &= \max \left\{ \begin{array}{c} 36.42540500220569 \\ 36.90598652299325 \\ 36.9883916074345 \\ 36.998728804929435 \\ 36.99986944419105 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.99999846149633, \quad x_6^0 = 8 \\
\varphi_6(34) &= \max \left\{ \begin{array}{c} 36.4254050047097 \\ 36.905986534094126 \\ 36.98839163246341 \\ 36.99872884497569 \\ 36.99986948450808 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.999999150072995, \quad x_6^0 = 8 \\
\varphi_6(35) &= \max \left\{ \begin{array}{c} 36.425405006990474 \\ 36.905986536598135 \\ 36.98839164356428 \\ 36.99872887000459 \\ 36.999869524554335 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.99999958043341, \quad x_6^0 = 8 \\
\varphi_6(36) &= \max \left\{ \begin{array}{c} 36.42540500841595 \\ 36.905986538878906 \\ 36.988391646068294 \\ 36.998728881105464 \\ 36.99986954958324 \\ \dots\dots\dots \\ 31.454246193502783 \\ 27.527508749057723 \\ 17.568376463442362 \\ 9.966673010385273 \\ 7.0 \end{array} \right\} = 36.999999760655314, \quad x_6^0 = 8
\end{aligned}$$



## 7 Product 7

$$\varphi_7(1) = \max \{ 1.9633687222225316 \} = 1.9633687222225316, \quad x_7^0 = 1$$

$$\varphi_7(2) = \max \left\{ \begin{array}{c} 8.38877373185524 \\ 1.9986583745587394 \end{array} \right\} = 8.38877373185524, \quad x_7^0 = 1$$

$$\varphi_7(3) = \max \left\{ \begin{array}{c} 11.355446742240513 \\ 8.424063384191449 \\ 1.9999631349523876 \end{array} \right\} = 11.355446742240513, \quad x_7^0 = 1$$

$$\varphi_7(4) = \max \left\{ \begin{array}{c} 18.9571501952976 \\ 11.39073639457672 \\ 8.425368144585097 \\ 1.999999099718754 \end{array} \right\} = 18.9571501952976, \quad x_7^0 = 1$$

$$\varphi_7(5) = \max \left\{ \begin{array}{c} 28.91628248091296 \\ 18.99243984763381 \\ 11.39204115497037 \\ 8.425404109351462 \\ 1.9999999793884642 \end{array} \right\} = 28.91628248091296, \quad x_7^0 = 1$$

$$\varphi_7(6) = \max \left\{ \begin{array}{c} 32.84301992535802 \\ 28.951572133249172 \\ 18.99374460802746 \\ 11.392077119736737 \\ 8.425404989021173 \\ 1.999999995469837 \end{array} \right\} = 32.84301992535802, \quad x_7^0 = 1$$

$$\varphi_7(7) = \max \left\{ \begin{array}{c} 37.5940845835187 \\ 32.87830957769423 \\ 28.95287689364282 \\ 18.993780572793824 \\ 11.392077999406446 \\ 8.425405009179691 \\ 1.999999999903197 \end{array} \right\} = 37.5940845835187, \quad x_7^0 = 1$$

$$\varphi_7(8) = \max \left\{ \begin{array}{c} 38.07466611540713 \\ 37.629374235854904 \\ 32.879614338087876 \\ 28.952912858409185 \\ 18.993781452463534 \\ 11.392078019564966 \\ 8.425405009623027 \\ 1.999999999997975 \end{array} \right\} = 38.07466611540713, \quad x_7^0 = 1$$

$$\begin{aligned}
\varphi_7(9) &= \max \left\{ \begin{array}{c} 38.43335178122221 \\ 38.10995576774334 \\ 37.630678996248555 \\ 32.879650302854245 \\ 28.952913738078895 \\ 18.993781472622054 \\ 11.392078020008302 \\ 8.425405009632506 \\ 1.999999999999996 \end{array} \right\} = 38.43335178122221, \quad x_7^0 = 1 \\
\varphi_7(10) &= \max \left\{ \begin{array}{c} 38.65753032235664 \\ 38.46864143355841 \\ 38.11126052813699 \\ 37.630714961014924 \\ 32.87965118252396 \\ 28.952913758237415 \\ 18.99378147306539 \\ 11.39207802001778 \\ 8.425405009632705 \\ 2.0 \end{array} \right\} = 38.65753032235664, \quad x_7^0 = 1 \\
\varphi_7(11) &= \max \left\{ \begin{array}{c} 38.739935431826794 \\ 38.692819974692846 \\ 38.46994619395206 \\ 38.11129649290336 \\ 37.63071584068463 \\ \dots\dots\dots \\ 28.95291375868075 \\ 18.99378147307487 \\ 11.392078020017978 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.739935431826794, \quad x_7^0 = 1 \\
\varphi_7(12) &= \max \left\{ \begin{array}{c} 38.81051473649921 \\ 38.775225084163 \\ 38.6941247350865 \\ 38.46998215871843 \\ 38.11129737257306 \\ \dots\dots\dots \\ 28.95291375869023 \\ 18.993781473075067 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.81051473649921, \quad x_7^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_7(13) &= \max \left\{ \begin{array}{c} 38.85104841965751 \\ 38.84580438883541 \\ 38.77652984455665 \\ 38.694160699852866 \\ 38.469983038388136 \\ \dots\dots\dots \\ 28.95291375869043 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.85104841965751, \quad x_7^0 = 1 \\
\varphi_7(14) &= \max \left\{ \begin{array}{c} 38.88769783099174 \\ 38.88633807199371 \\ 38.84710914922906 \\ 38.77656580932302 \\ 38.69416157952257 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.88769783099174, \quad x_7^0 = 1 \\
\varphi_7(15) &= \max \left\{ \begin{array}{c} 38.92028440747189 \\ 38.922987483327944 \\ 38.887642832387364 \\ 38.84714511399543 \\ 38.77656668899272 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.922987483327944, \quad x_7^0 = 2 \\
\varphi_7(16) &= \max \left\{ \begin{array}{c} 38.94319028955579 \\ 38.95557405980809 \\ 38.924292243721595 \\ 38.88767879715373 \\ 38.84714599366514 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.95557405980809, \quad x_7^0 = 2
\end{aligned}$$

$$\begin{aligned}
\varphi_7(17) &= \max \left\{ \begin{array}{c} 38.95352752709697 \\ 38.97847994189199 \\ 38.956878820201744 \\ 38.924328208487964 \\ 38.88767967682344 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.97847994189199, \quad x_7^0 = 2 \\
\varphi_7(18) &= \max \left\{ \begin{array}{c} 38.956292383907325 \\ 38.98881717943318 \\ 38.97978470228564 \\ 38.95691478496811 \\ 38.92432908815767 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.98881717943318, \quad x_7^0 = 2 \\
\varphi_7(19) &= \max \left\{ \begin{array}{c} 38.95890190469462 \\ 38.99158203624353 \\ 38.99012193982683 \\ 38.97982066705201 \\ 38.95691566463782 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.99158203624353, \quad x_7^0 = 2 \\
\varphi_7(20) &= \max \left\{ \begin{array}{c} 38.960629940201095 \\ 38.994191557030824 \\ 38.99288679663718 \\ 38.9901579045932 \\ 38.979821546721716 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.994191557030824, \quad x_7^0 = 2
\end{aligned}$$

$$\begin{aligned}
\varphi_7(21) &= \max \left\{ \begin{array}{c} 38.96177061977974 \\ 38.9959195925373 \\ 38.995496317424475 \\ 38.99292276140355 \\ 38.9901587842629 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.9959195925373, \quad x_7^0 = 2 \\
\varphi_7(22) &= \max \left\{ \begin{array}{c} 38.96249869429946 \\ 38.997060272115945 \\ 38.99722435293095 \\ 38.995532282190844 \\ 38.992923641073254 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.99722435293095, \quad x_7^0 = 3 \\
\varphi_7(23) &= \max \left\{ \begin{array}{c} 38.96283067784493 \\ 38.997788346635666 \\ 38.9983650325096 \\ 38.99726031769732 \\ 38.99553316186055 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.9983650325096, \quad x_7^0 = 3 \\
\varphi_7(24) &= \max \left\{ \begin{array}{c} 38.96301505474285 \\ 38.99812033018113 \\ 38.99909310702932 \\ 38.998400997275965 \\ 38.997261197367024 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.99909310702932, \quad x_7^0 = 3
\end{aligned}$$

$$\begin{aligned}
\varphi_7(25) &= \max \left\{ \begin{array}{c} 38.96313263874408 \\ 38.99830470707905 \\ 38.99942509057478 \\ 38.999129071795686 \\ 38.99840187694567 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.99942509057478, \quad x_7^0 = 3 \\
\varphi_7(26) &= \max \left\{ \begin{array}{c} 38.963247874305274 \\ 38.99842229108028 \\ 38.9996094674727 \\ 38.99946105534115 \\ 38.99912995146539 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.9996094674727, \quad x_7^0 = 3 \\
\varphi_7(27) &= \max \left\{ \begin{array}{c} 38.963319803838004 \\ 38.99853752664148 \\ 38.99972705147393 \\ 38.99964543223907 \\ 38.99946193501086 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.99972705147393, \quad x_7^0 = 3 \\
\varphi_7(28) &= \max \left\{ \begin{array}{c} 38.963331959693114 \\ 38.99860945617421 \\ 38.99984228703513 \\ 38.9997630162403 \\ 38.999646311908776 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.99984228703513, \quad x_7^0 = 3
\end{aligned}$$

$$\begin{aligned}
\varphi_7(29) &= \max \left\{ \begin{array}{c} 38.96334357719126 \\ 38.99862161202932 \\ 38.99991421656786 \\ 38.9998782518015 \\ 38.99976389591001 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.99991421656786, \quad x_7^0 = 3 \\
\varphi_7(30) &= \max \left\{ \begin{array}{c} 38.96335508223759 \\ 38.998633229527464 \\ 38.99992637242297 \\ 38.99995018133423 \\ 38.999879131471204 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.99995018133423, \quad x_7^0 = 4 \\
\varphi_7(31) &= \max \left\{ \begin{array}{c} 38.96336227289155 \\ 38.998644734573794 \\ 38.999937989921115 \\ 38.99996233718934 \\ 38.999951061003934 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.99996233718934, \quad x_7^0 = 4 \\
\varphi_7(32) &= \max \left\{ \begin{array}{c} 38.96336430941456 \\ 38.998651925227755 \\ 38.9999494967446 \\ 38.99997395468748 \\ 38.999963216859044 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.99997395468748, \quad x_7^0 = 4
\end{aligned}$$

$$\begin{aligned}
\varphi_7(33) &= \max \left\{ \begin{array}{c} 38.96336606875398 \\ 38.99865396175076 \\ 38.999956685621406 \\ 38.999985459733814 \\ 38.99997483435719 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.999985459733814, \quad x_7^0 = 4 \\
\varphi_7(34) &= \max \left\{ \begin{array}{c} 38.963367183718866 \\ 38.99865572109018 \\ 38.99995872214441 \\ 38.999992650387775 \\ 38.99998633940352 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.999992650387775, \quad x_7^0 = 4 \\
\varphi_7(35) &= \max \left\{ \begin{array}{c} 38.96336787229553 \\ 38.99865683605507 \\ 38.99996048148383 \\ 38.99999468691078 \\ 38.99999353005748 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.99999468691078, \quad x_7^0 = 4 \\
\varphi_7(36) &= \max \left\{ \begin{array}{c} 38.963368302655944 \\ 38.99865752463173 \\ 38.99996159644872 \\ 38.9999964462502 \\ 38.99999556658049 \\ \dots\dots\dots \\ 28.952913758690432 \\ 18.99378147307507 \\ 11.392078020017982 \\ 8.425405009632708 \\ 2.0 \end{array} \right\} = 38.9999964462502, \quad x_7^0 = 4
\end{aligned}$$



## 8 Product 8

$$\begin{aligned}
\varphi_8(1) &= \max \{ 7.946096424007316 \} = 7.946096424007316, \quad x_8^0 = 1 \\
\varphi_8(2) &= \max \left\{ \begin{array}{c} 9.909465146229849 \\ 7.999273617613029 \end{array} \right\} = 9.909465146229849, \quad x_8^0 = 1 \\
\varphi_8(3) &= \max \left\{ \begin{array}{c} 16.334870155862557 \\ 9.962642339835561 \\ 7.999992658346555 \end{array} \right\} = 16.334870155862557, \quad x_8^0 = 1 \\
\varphi_8(4) &= \max \left\{ \begin{array}{c} 19.30154316624783 \\ 16.38804734946827 \\ 9.963361380569086 \\ 7.999999934043085 \end{array} \right\} = 19.30154316624783, \quad x_8^0 = 1 \\
\varphi_8(5) &= \max \left\{ \begin{array}{c} 26.903246619304916 \\ 19.35472035985354 \\ 16.388766390201795 \\ 9.963368656265617 \\ 7.99999999444484 \end{array} \right\} = 26.903246619304916, \quad x_8^0 = 1 \\
\varphi_8(6) &= \max \left\{ \begin{array}{c} 36.86237890492028 \\ 26.95642381291063 \\ 19.355439400587066 \\ 16.388773665898327 \\ 9.963368721667017 \\ 7.99999999995508 \end{array} \right\} = 36.86237890492028, \quad x_8^0 = 1 \\
\varphi_8(7) &= \max \left\{ \begin{array}{c} 40.78911634936534 \\ 36.91555609852599 \\ 26.957142853644157 \\ 19.3554466762836 \\ 16.388773731299725 \\ 9.96336872221804 \\ 7.99999999999963 \end{array} \right\} = 40.78911634936534, \quad x_8^0 = 1 \\
\varphi_8(8) &= \max \left\{ \begin{array}{c} 45.540181007526016 \\ 40.84229354297105 \\ 36.91627513925952 \\ 26.957150129340686 \\ 19.355446741684997 \\ 16.388773731850748 \\ 9.963368722222494 \\ 8.0 \end{array} \right\} = 45.540181007526016, \quad x_8^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_8(9) &= \max \left\{ \begin{array}{c} 46.02076253941445 \\ 45.59335820113173 \\ 40.84301258370458 \\ 36.916282414956044 \\ 26.957150194742084 \\ 19.35544674223602 \\ 16.388773731855203 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.02076253941445, \quad x_8^0 = 1 \\
\varphi_8(10) &= \max \left\{ \begin{array}{c} 46.37944820522952 \\ 46.07393973302016 \\ 45.59407724186526 \\ 40.84301985940111 \\ 36.916282480357445 \\ 26.95715019529311 \\ 19.355446742240474 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.37944820522952, \quad x_8^0 = 1 \\
\varphi_8(11) &= \max \left\{ \begin{array}{c} 46.60362674636396 \\ 46.432625398835235 \\ 46.07465877375369 \\ 45.59408451756178 \\ 40.843019924802505 \\ ..... \\ 26.957150195297565 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.60362674636396, \quad x_8^0 = 1 \\
\varphi_8(12) &= \max \left\{ \begin{array}{c} 46.68603185583411 \\ 46.65680393996967 \\ 46.433344439568764 \\ 46.074666049450215 \\ 45.594084582963184 \\ ..... \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.68603185583411, \quad x_8^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_8(13) &= \max \left\{ \begin{array}{c} 46.75661116050652 \\ 46.73920904943982 \\ 46.6575229807032 \\ 46.43335171526529 \\ 46.07466611485162 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.75661116050652, \quad x_8^0 = 1 \\
\varphi_8(14) &= \max \left\{ \begin{array}{c} 46.797144843664825 \\ 46.809788354112236 \\ 46.73992809017335 \\ 46.657530256399724 \\ 46.43335178066669 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.809788354112236, \quad x_8^0 = 2 \\
\varphi_8(15) &= \max \left\{ \begin{array}{c} 46.833794254999056 \\ 46.85032203727054 \\ 46.810507394845764 \\ 46.73993536586988 \\ 46.657530321801126 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.85032203727054, \quad x_8^0 = 2 \\
\varphi_8(16) &= \max \left\{ \begin{array}{c} 46.86908390733526 \\ 46.88697144860477 \\ 46.851041078004066 \\ 46.81051467054229 \\ 46.73993543127128 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.88697144860477, \quad x_8^0 = 2
\end{aligned}$$

$$\begin{aligned}
\varphi_8(17) &= \max \left\{ \begin{array}{c} 46.90167048381541 \\ 46.92226110094097 \\ 46.8876904893383 \\ 46.85104835370059 \\ 46.81051473594369 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.92226110094097, \quad x_8^0 = 2 \\
\varphi_8(18) &= \max \left\{ \begin{array}{c} 46.924576365899306 \\ 46.95484767742112 \\ 46.9229801416745 \\ 46.88769776503483 \\ 46.85104841910199 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.95484767742112, \quad x_8^0 = 2 \\
\varphi_8(19) &= \max \left\{ \begin{array}{c} 46.93491360344049 \\ 46.97775355950502 \\ 46.95556671815465 \\ 46.92298741737103 \\ 46.887697830436224 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.97775355950502, \quad x_8^0 = 2 \\
\varphi_8(20) &= \max \left\{ \begin{array}{c} 46.937678460250844 \\ 46.988090797046205 \\ 46.97847260023855 \\ 46.955573993851175 \\ 46.92298748277243 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.988090797046205, \quad x_8^0 = 2
\end{aligned}$$

$$\begin{aligned}
\varphi_8(21) &= \max \left\{ \begin{array}{c} 46.94028798103814 \\ 46.990855653856556 \\ 46.98880983777973 \\ 46.97847987593508 \\ 46.95557405925258 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.990855653856556, \quad x_8^0 = 2 \\
\varphi_8(22) &= \max \left\{ \begin{array}{c} 46.94201601654461 \\ 46.99346517464385 \\ 46.991574694590085 \\ 46.98881711347626 \\ 46.978479941336474 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.99346517464385, \quad x_8^0 = 2 \\
\varphi_8(23) &= \max \left\{ \begin{array}{c} 46.943320776938265 \\ 46.995193210150326 \\ 46.99418421537738 \\ 46.99158197028662 \\ 46.98881717887766 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.995193210150326, \quad x_8^0 = 2 \\
\varphi_8(24) &= \max \left\{ \begin{array}{c} 46.94446145651691 \\ 46.99649797054398 \\ 46.995912250883855 \\ 46.994191491073906 \\ 46.99158203568801 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.99649797054398, \quad x_8^0 = 2
\end{aligned}$$

$$\begin{aligned}
\varphi_8(25) &= \max \left\{ \begin{array}{c} 46.94518953103663 \\ 46.997638650122624 \\ 46.997217011277506 \\ 46.99591952658038 \\ 46.99419155647531 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.997638650122624, \quad x_8^0 = 2 \\
\varphi_8(26) &= \max \left\{ \begin{array}{c} 46.9455215145821 \\ 46.998366724642345 \\ 46.99835769085615 \\ 46.99722428697403 \\ 46.99591959198178 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.998366724642345, \quad x_8^0 = 2 \\
\varphi_8(27) &= \max \left\{ \begin{array}{c} 46.94570589148002 \\ 46.99869870818781 \\ 46.999085765375874 \\ 46.998364966552685 \\ 46.99722435237543 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.999085765375874, \quad x_8^0 = 3 \\
\varphi_8(28) &= \max \left\{ \begin{array}{c} 46.94582347548125 \\ 46.99888308508573 \\ 46.99941774892134 \\ 46.9990930410724 \\ 46.99836503195408 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.99941774892134, \quad x_8^0 = 3
\end{aligned}$$

$$\begin{aligned}
\varphi_8(29) &= \max \left\{ \begin{array}{c} 46.945938711042444 \\ 46.99900066908696 \\ 46.99960212581926 \\ 46.999425024617864 \\ 46.9990931064738 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.99960212581926, \quad x_8^0 = 3 \\
\varphi_8(30) &= \max \left\{ \begin{array}{c} 46.946010640575174 \\ 46.99911590464816 \\ 46.99971970982049 \\ 46.999609401515784 \\ 46.999425090019265 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.99971970982049, \quad x_8^0 = 3 \\
\varphi_8(31) &= \max \left\{ \begin{array}{c} 46.94604660534154 \\ 46.99918783418089 \\ 46.999834945381686 \\ 46.999726985517015 \\ 46.999609466917185 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.999834945381686, \quad x_8^0 = 3 \\
\varphi_8(32) &= \max \left\{ \begin{array}{c} 46.94605876119665 \\ 46.999223798947256 \\ 46.999906874914416 \\ 46.99984222107821 \\ 46.999727050918416 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.999906874914416, \quad x_8^0 = 3
\end{aligned}$$

$$\begin{aligned}
\varphi_8(33) &= \max \left\{ \begin{array}{c} 46.9460703786948 \\ 46.999235954802366 \\ 46.999942839680784 \\ 46.99991415061095 \\ 46.99984228647961 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.999942839680784, \quad x_8^0 = 3 \\
\varphi_8(34) &= \max \left\{ \begin{array}{c} 46.94608188374113 \\ 46.99924757230051 \\ 46.999954995535894 \\ 46.99995011537732 \\ 46.99991421601234 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.999954995535894, \quad x_8^0 = 3 \\
\varphi_8(35) &= \max \left\{ \begin{array}{c} 46.94608907439509 \\ 46.99925907734684 \\ 46.99996661303404 \\ 46.99996227123242 \\ 46.99995018077871 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.99996661303404, \quad x_8^0 = 3 \\
\varphi_8(36) &= \max \left\{ \begin{array}{c} 46.9460911109181 \\ 46.9992662680008 \\ 46.99997811808037 \\ 46.999973888730565 \\ 46.99996233663382 \\ \dots\dots\dots \\ 26.9571501952976 \\ 19.355446742240513 \\ 16.38877373185524 \\ 9.963368722222532 \\ 8.0 \end{array} \right\} = 46.99997811808037, \quad x_8^0 = 3
\end{aligned}$$



## 9 Product 9

$$\varphi_9(1) = \max \{ 2.966673010385273 \} = 2.966673010385273, \quad x_9^0 = 1$$

$$\varphi_9(2) = \max \left\{ \begin{array}{c} 10.91276943439259 \\ 2.9992595868654193 \end{array} \right\} = 10.91276943439259, \quad x_9^0 = 1$$

$$\varphi_9(3) = \max \left\{ \begin{array}{c} 12.876138156615122 \\ 10.945356010872736 \\ 2.9999876613851386 \end{array} \right\} = 12.876138156615122, \quad x_9^0 = 1$$

$$\varphi_9(4) = \max \left\{ \begin{array}{c} 19.301543166247832 \\ 12.908724733095267 \\ 10.946084085392455 \\ 2.999999817240248 \end{array} \right\} = 19.301543166247832, \quad x_9^0 = 1$$

$$\varphi_9(5) = \max \left\{ \begin{array}{c} 22.268216176633103 \\ 19.334129742727978 \\ 12.909452807614986 \\ 10.946096241247563 \\ 2.9999999974621536 \end{array} \right\} = 22.268216176633103, \quad x_9^0 = 1$$

$$\varphi_9(6) = \max \left\{ \begin{array}{c} 29.869919629690187 \\ 22.30080275311325 \\ 19.334857817247695 \\ 12.909464963470096 \\ 10.94609642146947 \\ 2.9999999999661693 \end{array} \right\} = 29.869919629690187, \quad x_9^0 = 1$$

$$\varphi_9(7) = \max \left\{ \begin{array}{c} 39.82905191530555 \\ 29.902506206170337 \\ 22.301530827632966 \\ 19.334869973102805 \\ 12.909465143692003 \\ 10.946096423973486 \\ 2.999999999995617 \end{array} \right\} = 39.82905191530555, \quad x_9^0 = 1$$

$$\varphi_9(8) = \max \left\{ \begin{array}{c} 43.75578935975061 \\ 39.8616384917857 \\ 29.903234280690054 \\ 22.301542983488076 \\ 19.33487015332471 \\ 12.909465146196018 \\ 10.946096424006878 \\ 2.999999999999947 \end{array} \right\} = 43.75578935975061, \quad x_9^0 = 1$$

$$\begin{aligned}
\varphi_9(9) &= \max \left\{ \begin{array}{c} 48.50685401791129 \\ 43.78837593623076 \\ 39.86236656630542 \\ 29.903246436545164 \\ 22.301543163709983 \\ 19.334870155828725 \\ 12.90946514622941 \\ 10.946096424007312 \\ 3.0 \end{array} \right\} = 48.50685401791129, \quad x_9^0 = 1 \\
\varphi_9(10) &= \max \left\{ \begin{array}{c} 48.98743554979972 \\ 48.539440594391436 \\ 43.78910401075048 \\ 39.86237872216053 \\ 29.90324661676707 \\ 22.301543166213996 \\ 19.33487015586212 \\ 12.909465146229843 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 48.98743554979972, \quad x_9^0 = 1 \\
\varphi_9(11) &= \max \left\{ \begin{array}{c} 49.346121215614794 \\ 49.02002212627987 \\ 48.54016866891116 \\ 43.78911616660558 \\ 39.86237890238243 \\ \dots\dots\dots \\ 22.30154316624739 \\ 19.334870155862554 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.346121215614794, \quad x_9^0 = 1 \\
\varphi_9(12) &= \max \left\{ \begin{array}{c} 49.57029975674923 \\ 49.37870779209494 \\ 49.02075020079959 \\ 48.54018082476627 \\ 43.78911634682749 \\ \dots\dots\dots \\ 22.301543166247825 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.57029975674923, \quad x_9^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_9(13) &= \max \left\{ \begin{array}{c} 49.65270486621938 \\ 49.60288633322938 \\ 49.379435866614664 \\ 49.0207623566547 \\ 48.54018100498817 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.65270486621938, \quad x_9^0 = 1 \\
\varphi_9(14) &= \max \left\{ \begin{array}{c} 49.723284170891795 \\ 49.68529144269953 \\ 49.6036144077491 \\ 49.379448022469774 \\ 49.0207625368766 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.723284170891795, \quad x_9^0 = 1 \\
\varphi_9(15) &= \max \left\{ \begin{array}{c} 49.77646136449751 \\ 49.755870747371944 \\ 49.68601951721925 \\ 49.60362656360421 \\ 49.37944820269168 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.77646136449751, \quad x_9^0 = 1 \\
\varphi_9(16) &= \max \left\{ \begin{array}{c} 49.81699504765581 \\ 49.809047940977656 \\ 49.756598821891664 \\ 49.68603167307435 \\ 49.60362674382611 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.81699504765581, \quad x_9^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_9(17) &= \max \left\{ \begin{array}{c} 49.85364445899004 \\ 49.84958162413596 \\ 49.80977601549738 \\ 49.756610977746774 \\ 49.686031853296264 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.85364445899004, \quad x_9^0 = 1 \\
\varphi_9(18) &= \max \left\{ \begin{array}{c} 49.88893411132624 \\ 49.88623103547019 \\ 49.85030969865568 \\ 49.80978817135248 \\ 49.75661115796868 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.88893411132624, \quad x_9^0 = 1 \\
\varphi_9(19) &= \max \left\{ \begin{array}{c} 49.92152068780639 \\ 49.92152068780639 \\ 49.88695910998991 \\ 49.85032185451078 \\ 49.80978835157439 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.92152068780639, \quad x_9^0 = 1 \\
\varphi_9(20) &= \max \left\{ \begin{array}{c} 49.94442656989029 \\ 49.95410726428654 \\ 49.92224876232611 \\ 49.88697126584502 \\ 49.85032203473269 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.95410726428654, \quad x_9^0 = 2
\end{aligned}$$

$$\begin{aligned}
\varphi_9(21) &= \max \left\{ \begin{array}{c} 49.954763807431476 \\ 49.97701314637044 \\ 49.95483533880626 \\ 49.92226091818122 \\ 49.88697144606692 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.97701314637044, \quad x_9^0 = 2 \\
\varphi_9(22) &= \max \left\{ \begin{array}{c} 49.95752866424183 \\ 49.987350383911625 \\ 49.97774122089016 \\ 49.954847494661365 \\ 49.922261098403126 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.987350383911625, \quad x_9^0 = 2 \\
\varphi_9(23) &= \max \left\{ \begin{array}{c} 49.96013818502912 \\ 49.99011524072198 \\ 49.988078458431346 \\ 49.97775337674527 \\ 49.954847674883275 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.99011524072198, \quad x_9^0 = 2 \\
\varphi_9(24) &= \max \left\{ \begin{array}{c} 49.9618662205356 \\ 49.99272476150927 \\ 49.9908433152417 \\ 49.98809061428645 \\ 49.97775355696717 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.99272476150927, \quad x_9^0 = 2
\end{aligned}$$

$$\begin{aligned}
\varphi_9(25) &= \max \left\{ \begin{array}{c} 49.96317098092925 \\ 49.99445279701575 \\ 49.99345283602899 \\ 49.99085547109681 \\ 49.98809079450836 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.99445279701575, \quad x_9^0 = 2 \\
\varphi_9(26) &= \max \left\{ \begin{array}{c} 49.964311660507896 \\ 49.9957575574094 \\ 49.99518087153547 \\ 49.993464991884096 \\ 49.99085565131871 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.9957575574094, \quad x_9^0 = 2 \\
\varphi_9(27) &= \max \left\{ \begin{array}{c} 49.96503973502762 \\ 49.996898236988045 \\ 49.99648563192912 \\ 49.99519302739057 \\ 49.993465172106006 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.996898236988045, \quad x_9^0 = 2 \\
\varphi_9(28) &= \max \left\{ \begin{array}{c} 49.965758775761145 \\ 49.997626311507766 \\ 49.997626311507766 \\ 49.99649778778422 \\ 49.99519320761248 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.997626311507766, \quad x_9^0 = 2
\end{aligned}$$

$$\begin{aligned}
\varphi_9(29) &= \max \left\{ \begin{array}{c} 49.96609075930661 \\ 49.998345352241294 \\ 49.998354386027486 \\ 49.997638467362876 \\ 49.99649796800613 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.998354386027486, \quad x_9^0 = 3 \\
\varphi_9(30) &= \max \left\{ \begin{array}{c} 49.96627513620453 \\ 49.99867733578676 \\ 49.999073426761015 \\ 49.99836654188259 \\ 49.99763864758478 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.999073426761015, \quad x_9^0 = 3 \\
\varphi_9(31) &= \max \left\{ \begin{array}{c} 49.96639272020576 \\ 49.99886171268468 \\ 49.99940541030648 \\ 49.99908558261612 \\ 49.9983667221045 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.99940541030648, \quad x_9^0 = 3 \\
\varphi_9(32) &= \max \left\{ \begin{array}{c} 49.96650795576696 \\ 49.99897929668591 \\ 49.9995897872044 \\ 49.99941756616158 \\ 49.99908576283803 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.9995897872044, \quad x_9^0 = 3
\end{aligned}$$

$$\begin{aligned}
\varphi_9(33) &= \max \left\{ \begin{array}{c} 49.96657988529969 \\ 49.999094532247106 \\ 49.99970737120563 \\ 49.9996019430595 \\ 49.99941774638349 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.99970737120563, \quad x_9^0 = 3 \\
\varphi_9(34) &= \max \left\{ \begin{array}{c} 49.966615850066056 \\ 49.999166461779836 \\ 49.99982260676683 \\ 49.99971952706073 \\ 49.99960212328141 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.99982260676683, \quad x_9^0 = 3 \\
\varphi_9(35) &= \max \left\{ \begin{array}{c} 49.966628005921166 \\ 49.999202426546205 \\ 49.99989453629956 \\ 49.99983476262193 \\ 49.999719707282644 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.99989453629956, \quad x_9^0 = 3 \\
\varphi_9(36) &= \max \left\{ \begin{array}{c} 49.96663962341931 \\ 49.999214582401315 \\ 49.999930501065926 \\ 49.99990669215467 \\ 49.99983494284384 \\ \dots\dots\dots \\ 22.30154316624783 \\ 19.334870155862557 \\ 12.909465146229849 \\ 10.946096424007315 \\ 3.0 \end{array} \right\} = 49.999930501065926, \quad x_9^0 = 3
\end{aligned}$$



