

1 Product 1

$$\varphi_1(1) = \max \{ 0.24893534183931976 \} = 0.24893534183931976, \quad x_1^0 = 1$$

$$\varphi_1(2) = \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \end{array} \right\} = 1.9823662596449783, \quad x_1^0 = 2$$

$$\varphi_1(3) = \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \end{array} \right\} = 3.7370977108617645, \quad x_1^0 = 3$$

$$\varphi_1(4) = \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \end{array} \right\} = 4.6124753997653665, \quad x_1^0 = 4$$

$$\varphi_1(5) = \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \end{array} \right\} = 4.9065112274238905, \quad x_1^0 = 5$$

$$\varphi_1(6) = \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ 4.981446092495504 \end{array} \right\} = 4.981446092495504, \quad x_1^0 = 6$$

$$\varphi_1(7) = \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ 4.981446092495504 \\ 4.996874488848067 \end{array} \right\} = 4.996874488848067, \quad x_1^0 = 7$$

$$\varphi_1(8) = \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ 4.981446092495504 \\ 4.996874488848067 \\ 4.9995427937340144 \end{array} \right\} = 4.9995427937340144, \quad x_1^0 = 8$$

$$\begin{aligned}
\varphi_1(9) &= \max \left\{ \begin{array}{l} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ 4.981446092495504 \\ 4.996874488848067 \\ 4.9995427937340144 \\ 4.999940909744652 \end{array} \right\} = 4.999940909744652, \quad x_1^0 = 9 \\
\varphi_1(10) &= \max \left\{ \begin{array}{l} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ 4.981446092495504 \\ 4.996874488848067 \\ 4.9995427937340144 \\ 4.999940909744652 \\ 4.999993160652433 \end{array} \right\} = 4.999993160652433, \quad x_1^0 = 10 \\
\varphi_1(11) &= \max \left\{ \begin{array}{l} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 4.996874488848067 \\ 4.9995427937340144 \\ 4.999940909744652 \\ 4.999993160652433 \\ 4.999999283297575 \end{array} \right\} = 4.999999283297575, \quad x_1^0 = 11 \\
\varphi_1(12) &= \max \left\{ \begin{array}{l} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 4.9995427937340144 \\ 4.999940909744652 \\ 4.999993160652433 \\ 4.999999283297575 \\ 4.999999931392274 \end{array} \right\} = 4.999999931392274, \quad x_1^0 = 12
\end{aligned}$$

$$\begin{aligned}
\varphi_1(13) &= \max \left\{ \begin{array}{l} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 4.999940909744652 \\ 4.999993160652433 \\ 4.999999283297575 \\ 4.999999931392274 \\ 4.999999993955461 \end{array} \right\} = 4.999999993955461, \quad x_1^0 = 13 \\
\varphi_1(14) &= \max \left\{ \begin{array}{l} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 4.999993160652433 \\ 4.999999283297575 \\ 4.999999931392274 \\ 4.999999993955461 \\ 4.99999999506756 \end{array} \right\} = 4.99999999506756, \quad x_1^0 = 14 \\
\varphi_1(15) &= \max \left\{ \begin{array}{l} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 4.999999283297575 \\ 4.999999931392274 \\ 4.999999993955461 \\ 4.99999999506756 \\ 4.99999999962517 \end{array} \right\} = 4.99999999962517, \quad x_1^0 = 15 \\
\varphi_1(16) &= \max \left\{ \begin{array}{l} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 4.999999931392274 \\ 4.999999993955461 \\ 4.99999999506756 \\ 4.99999999962517 \\ 4.99999999997335 \end{array} \right\} = 4.99999999997335, \quad x_1^0 = 16
\end{aligned}$$

$$\begin{aligned}
& \varphi_1(17) = \max \left\{ \begin{array}{l} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 4.999999993955461 \\ 4.99999999506756 \\ 4.9999999962517 \\ 4.9999999997335 \\ 4.9999999998215 \end{array} \right\} = 4.999999999998215, \quad x_1^0 = \\
17
\end{aligned}$$

$$\begin{aligned}
& \varphi_1(18) = \max \left\{ \begin{array}{l} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 4.99999999506756 \\ 4.99999999962517 \\ 4.9999999997335 \\ 4.9999999998215 \\ 4.999999999989 \end{array} \right\} = 4.9999999999989, \quad x_1^0 = 18
\end{aligned}$$

$$\begin{aligned}
& \varphi_1(19) = \max \left\{ \begin{array}{l} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 4.99999999962517 \\ 4.9999999997335 \\ 4.9999999998215 \\ 4.999999999989 \\ 4.999999999999 \end{array} \right\} = 4.9999999999999, \quad x_1^0 = 19
\end{aligned}$$

$$\begin{aligned}
& \varphi_1(20) = \max \left\{ \begin{array}{l} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 4.9999999997335 \\ 4.9999999998215 \\ 4.999999999989 \\ 4.999999999999 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20
\end{aligned}$$

$$\begin{aligned}
\varphi_1(21) &= \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 4.9999999999998215 \\ 4.999999999999989 \\ 4.999999999999999 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20 \\
\varphi_1(22) &= \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 4.999999999999989 \\ 4.999999999999999 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20 \\
\varphi_1(23) &= \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 4.999999999999999 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20 \\
\varphi_1(24) &= \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20
\end{aligned}$$

$$\begin{aligned}
\varphi_1(25) &= \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20 \\
\varphi_1(26) &= \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20 \\
\varphi_1(27) &= \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20 \\
\varphi_1(28) &= \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20
\end{aligned}$$

$$\begin{aligned}
\varphi_1(29) = \max & \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20 \\
\varphi_1(30) = \max & \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20 \\
\varphi_1(31) = \max & \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20 \\
\varphi_1(32) = \max & \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20
\end{aligned}$$

$$\begin{aligned}
\varphi_1(33) &= \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20 \\
\varphi_1(34) &= \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20 \\
\varphi_1(35) &= \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20 \\
\varphi_1(36) &= \max \left\{ \begin{array}{c} 0.24893534183931976 \\ 1.9823662596449783 \\ 3.7370977108617645 \\ 4.6124753997653665 \\ 4.9065112274238905 \\ \dots\dots\dots \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \end{array} \right\} = 5.0, \quad x_1^0 = 20
\end{aligned}$$

2 Product 2

$$\varphi_2(1) = \max \{ 0.07326255555493688 \} = 0.07326255555493688, \quad x_2^0 = 1$$

$$\varphi_2(2) = \max \left\{ \begin{array}{c} 0.32219789739425664 \\ 1.0094197103379647 \end{array} \right\} = 1.0094197103379647, \quad x_2^0 = 2$$

$$\varphi_2(3) = \max \left\{ \begin{array}{c} 2.055628815199915 \\ 1.2583550521772846 \\ 2.402626798270039 \end{array} \right\} = 2.402626798270039, \quad x_2^0 = 3$$

$$\varphi_2(4) = \max \left\{ \begin{array}{c} 3.8103602664167013 \\ 2.991785969982943 \\ 2.651562140109359 \\ 3.361354799395259 \end{array} \right\} = 3.8103602664167013, \quad x_2^0 = 1$$

$$\varphi_2(5) = \max \left\{ \begin{array}{c} 4.685737955320303 \\ 4.746517421199729 \\ 4.384993057915017 \\ 3.6102901412345787 \\ 3.797455170122328 \end{array} \right\} = 4.746517421199729, \quad x_2^0 = 2$$

$$\varphi_2(6) = \max \left\{ \begin{array}{c} 4.979773782978827 \\ 5.621895110103331 \\ 6.139724509131804 \\ 5.343721059040237 \\ 4.046390511961648 \\ 3.9469114401786465 \end{array} \right\} = 6.139724509131804, \quad x_2^0 = 3$$

$$\varphi_2(7) = \max \left\{ \begin{array}{c} 5.054708648050441 \\ 5.915930937761855 \\ 7.015102198035406 \\ 7.098452510257023 \\ 5.779821429767306 \\ 4.195846782017966 \\ 3.98815720810584 \end{array} \right\} = 7.098452510257023, \quad x_2^0 = 4$$

$$\varphi_2(8) = \max \left\{ \begin{array}{c} 5.070137044403004 \\ 5.9908658028334685 \\ 7.30913802569393 \\ 7.973830199160625 \\ 7.5345528809840925 \\ 5.929277699823625 \\ 4.237092549945159 \\ 3.9977020151112814 \end{array} \right\} = 7.973830199160625, \quad x_2^0 = 4$$

$$\begin{aligned}
\varphi_2(9) &= \max \left\{ \begin{array}{l} 5.072805349288951 \\ 6.006294199186032 \\ 7.384072890765543 \\ 8.26786602681915 \\ 8.409930569887695 \\ 7.684009151040411 \\ 5.970523467750818 \\ 4.246637356950601 \\ 3.99960559216211 \end{array} \right\} = 8.409930569887695, \quad x_2^0 = 5 \\
\varphi_2(10) &= \max \left\{ \begin{array}{l} 5.0732034652995885 \\ 6.008962504071979 \\ 7.399501287118106 \\ 8.342800891890763 \\ 8.703966397546218 \\ 8.559386839944013 \\ 7.725254918967604 \\ 5.98006827475626 \\ 4.248540934001429 \\ 3.9999393284067097 \end{array} \right\} = 8.703966397546218, \quad x_2^0 = 5 \\
\varphi_2(11) &= \max \left\{ \begin{array}{l} 5.0732557162073695 \\ 6.009360620082616 \\ 7.4021695920040536 \\ 8.358229288243326 \\ 8.778901262617833 \\ \dots\dots\dots \\ 8.600632607871207 \\ 7.734799725973046 \\ 5.981971851807089 \\ 4.248874670246029 \\ 3.999991545200168 \end{array} \right\} = 8.853422667602537, \quad x_2^0 = 6 \\
\varphi_2(12) &= \max \left\{ \begin{array}{l} 5.0732618388525115 \\ 6.009412870990397 \\ 7.402567708014691 \\ 8.360897593129273 \\ 8.794329658970394 \\ \dots\dots\dots \\ 8.610177414876649 \\ 7.736703303023875 \\ 5.9823055880516876 \\ 4.248926887039488 \\ 3.9999989232344775 \end{array} \right\} = 8.92835753267415, \quad x_2^0 = 6
\end{aligned}$$

$$\begin{aligned}
\varphi_2(13) &= \max \left\{ \begin{array}{l} 5.073262486947211 \\ 6.009418993635539 \\ 7.402619958922472 \\ 8.36129570913991 \\ 8.796997963856342 \\ \dots\dots\dots \\ 8.612080991927476 \\ 7.737037039268474 \\ 5.9823578048451465 \\ 4.248934265073797 \\ 3.9999998737471176 \end{array} \right\} = 8.969603300601344, \quad x_2^0 = 7 \\
\varphi_2(14) &= \max \left\{ \begin{array}{l} 5.073262549510398 \\ 6.009419641730239 \\ 7.402626081567614 \\ 8.361347960047691 \\ 8.79739607986698 \\ \dots\dots\dots \\ 8.612414728172077 \\ 7.737089256061933 \\ 5.982365182879455 \\ 4.248935215586437 \\ 3.99999998628534 \end{array} \right\} = 8.985031696953907, \quad x_2^0 = 7 \\
\varphi_2(15) &= \max \left\{ \begin{array}{l} 5.073262555061693 \\ 6.009419704293426 \\ 7.402626729662313 \\ 8.361354082692834 \\ 8.79744833077476 \\ \dots\dots\dots \\ 8.612466944965535 \\ 7.7370966340962415 \\ 5.982366133392096 \\ 4.248935328124659 \\ 3.999999986123096 \end{array} \right\} = 8.994576503959347, \quad x_2^0 = 8 \\
\varphi_2(16) &= \max \left\{ \begin{array}{l} 5.073262555517454 \\ 6.009419709844721 \\ 7.4026267922255 \\ 8.361354730787532 \\ 8.797454453419903 \\ \dots\dots\dots \\ 8.612474322999844 \\ 7.7370975846088825 \\ 5.982366245930319 \\ 4.248935340451629 \\ 3.999999998685993 \end{array} \right\} = 8.997244808845295, \quad x_2^0 = 8
\end{aligned}$$

$$\begin{aligned}
\varphi_2(17) &= \max \left\{ \begin{array}{l} 5.0732625555522715 \\ 6.009419710300482 \\ 7.402626797776795 \\ 8.36135479335072 \\ 8.797455101514602 \\ \dots\dots\dots \\ 8.612475273512484 \\ 7.737097697147105 \\ 5.982366258257288 \\ 4.248935341707919 \\ 3.999999999988308 \end{array} \right\} = 8.999148385896124, \quad x_2^0 = 9 \\
\varphi_2(18) &= \max \left\{ \begin{array}{l} 5.073262555554758 \\ 6.009419710335299 \\ 7.402626798232556 \\ 8.361354798902015 \\ 8.797455164077789 \\ \dots\dots\dots \\ 8.612475386050706 \\ 7.7370977094740745 \\ 5.982366259513578 \\ 4.248935341827628 \\ 3.999999999999019 \end{array} \right\} = 8.999546501906762, \quad x_2^0 = 9 \\
\varphi_2(19) &= \max \left\{ \begin{array}{l} 5.073262555554926 \\ 6.009419710337786 \\ 7.402626798267374 \\ 8.361354799357777 \\ 8.797455169629085 \\ \dots\dots\dots \\ 8.612475398377676 \\ 7.737097710730364 \\ 5.982366259633286 \\ 4.248935341838338 \\ 3.999999999999223 \end{array} \right\} = 8.999880238151361, \quad x_2^0 = 10 \\
\varphi_2(20) &= \max \left\{ \begin{array}{l} 5.073262555554936 \\ 6.009419710337954 \\ 7.402626798269861 \\ 8.361354799392593 \\ 8.797455170084845 \\ \dots\dots\dots \\ 8.612475399633965 \\ 7.7370977108500725 \\ 5.982366259643998 \\ 4.248935341839242 \\ 3.999999999999942 \end{array} \right\} = 8.999932489059143, \quad x_2^0 = 10
\end{aligned}$$

$$\begin{aligned}
\varphi_2(21) &= \max \left\{ \begin{array}{c} 5.07326255554937 \\ 6.009419710337964 \\ 7.4026267982700285 \\ 8.36135479939508 \\ 8.797455170119662 \\ \dots\dots\dots \\ 8.612475399753674 \\ 7.737097710860784 \\ 5.9823662596449 \\ 4.248935341839314 \\ 3.999999999999996 \end{array} \right\} = 8.9999847058526, \quad x_2^0 = 11 \\
\varphi_2(22) &= \max \left\{ \begin{array}{c} 5.07326255554937 \\ 6.009419710337965 \\ 7.402626798270038 \\ 8.361354799395247 \\ 8.797455170122149 \\ \dots\dots\dots \\ 8.612475399764385 \\ 7.737097710861686 \\ 5.982366259644973 \\ 4.248935341839319 \\ 4.0 \end{array} \right\} = 8.99999208388691, \quad x_2^0 = 12 \\
\varphi_2(23) &= \max \left\{ \begin{array}{c} 5.07326255554937 \\ 6.009419710337965 \\ 7.402626798270039 \\ 8.361354799395258 \\ 8.797455170122317 \\ \dots\dots\dots \\ 8.61247539976529 \\ 7.737097710861759 \\ 5.982366259644978 \\ 4.24893534183932 \\ 4.0 \end{array} \right\} = 8.999998206532052, \quad x_2^0 = 12 \\
\varphi_2(24) &= \max \left\{ \begin{array}{c} 5.07326255554937 \\ 6.009419710337965 \\ 7.402626798270039 \\ 8.361354799395258 \\ 8.797455170122326 \\ \dots\dots\dots \\ 8.61247539976536 \\ 7.7370977108617645 \\ 5.982366259644978 \\ 4.24893534183932 \\ 4.0 \end{array} \right\} = 8.999999157044693, \quad x_2^0 = 13
\end{aligned}$$

$$\begin{aligned}
\varphi_2(25) &= \max \left\{ \begin{array}{c} 5.07326255554937 \\ 6.009419710337965 \\ 7.402626798270039 \\ 8.361354799395258 \\ 8.797455170122328 \\ \dots\dots\dots \\ 8.612475399765366 \\ 7.7370977108617645 \\ 5.982366259644978 \\ 4.24893534183932 \\ 4.0 \end{array} \right\} = 8.999999805139392, \quad x_2^0 = 13 \\
\varphi_2(26) &= \max \left\{ \begin{array}{c} 5.07326255554937 \\ 6.009419710337965 \\ 7.402626798270039 \\ 8.361354799395258 \\ 8.797455170122328 \\ \dots\dots\dots \\ 8.612475399765366 \\ 7.7370977108617645 \\ 5.982366259644978 \\ 4.24893534183932 \\ 4.0 \end{array} \right\} = 8.999999917677615, \quad x_2^0 = 14 \\
\varphi_2(27) &= \max \left\{ \begin{array}{c} 5.07326255554937 \\ 6.009419710337965 \\ 7.402626798270039 \\ 8.361354799395258 \\ 8.797455170122328 \\ \dots\dots\dots \\ 8.612475399765366 \\ 7.7370977108617645 \\ 5.982366259644978 \\ 4.24893534183932 \\ 4.0 \end{array} \right\} = 8.999999980240801, \quad x_2^0 = 14 \\
\varphi_2(28) &= \max \left\{ \begin{array}{c} 5.07326255554937 \\ 6.009419710337965 \\ 7.402626798270039 \\ 8.361354799395258 \\ 8.797455170122328 \\ \dots\dots\dots \\ 8.612475399765366 \\ 7.7370977108617645 \\ 5.982366259644978 \\ 4.24893534183932 \\ 4.0 \end{array} \right\} = 8.999999992567771, \quad x_2^0 = 15
\end{aligned}$$

$$\begin{aligned}
\varphi_2(29) &= \max \left\{ \begin{array}{c} 5.07326255554937 \\ 6.009419710337965 \\ 7.402626798270039 \\ 8.361354799395258 \\ 8.797455170122328 \\ \dots\dots\dots \\ 8.612475399765366 \\ 7.7370977108617645 \\ 5.982366259644978 \\ 4.24893534183932 \\ 4.0 \end{array} \right\} = 8.99999998119065, \quad x_2^0 = 15 \\
\varphi_2(30) &= \max \left\{ \begin{array}{c} 5.07326255554937 \\ 6.009419710337965 \\ 7.402626798270039 \\ 8.361354799395258 \\ 8.797455170122328 \\ \dots\dots\dots \\ 8.612475399765366 \\ 7.7370977108617645 \\ 5.982366259644978 \\ 4.24893534183932 \\ 4.0 \end{array} \right\} = 8.99999999375355, \quad x_2^0 = 16 \\
\varphi_2(31) &= \max \left\{ \begin{array}{c} 5.07326255554937 \\ 6.009419710337965 \\ 7.402626798270039 \\ 8.361354799395258 \\ 8.797455170122328 \\ \dots\dots\dots \\ 8.612475399765366 \\ 7.7370977108617645 \\ 5.982366259644978 \\ 4.24893534183932 \\ 4.0 \end{array} \right\} = 8.99999999831116, \quad x_2^0 = 16 \\
\varphi_2(32) &= \max \left\{ \begin{array}{c} 5.07326255554937 \\ 6.009419710337965 \\ 7.402626798270039 \\ 8.361354799395258 \\ 8.797455170122328 \\ \dots\dots\dots \\ 8.612475399765366 \\ 7.7370977108617645 \\ 5.982366259644978 \\ 4.24893534183932 \\ 4.0 \end{array} \right\} = 8.99999999950825, \quad x_2^0 = 17
\end{aligned}$$

$$\begin{aligned}
\varphi_2(33) &= \max \left\{ \begin{array}{c} 5.07326255554937 \\ 6.009419710337965 \\ 7.402626798270039 \\ 8.361354799395258 \\ 8.797455170122328 \\ \dots\dots\dots \\ 8.612475399765366 \\ 7.7370977108617645 \\ 5.982366259644978 \\ 4.24893534183932 \\ 4.0 \end{array} \right\} = 8.99999999985643, \quad x_2^0 = 17 \\
\varphi_2(34) &= \max \left\{ \begin{array}{c} 5.07326255554937 \\ 6.009419710337965 \\ 7.402626798270039 \\ 8.361354799395258 \\ 8.797455170122328 \\ \dots\dots\dots \\ 8.612475399765366 \\ 7.7370977108617645 \\ 5.982366259644978 \\ 4.24893534183932 \\ 4.0 \end{array} \right\} = 8.99999999996353, \quad x_2^0 = 18 \\
\varphi_2(35) &= \max \left\{ \begin{array}{c} 5.07326255554937 \\ 6.009419710337965 \\ 7.402626798270039 \\ 8.361354799395258 \\ 8.797455170122328 \\ \dots\dots\dots \\ 8.612475399765366 \\ 7.7370977108617645 \\ 5.982366259644978 \\ 4.24893534183932 \\ 4.0 \end{array} \right\} = 8.9999999999884, \quad x_2^0 = 18 \\
\varphi_2(36) &= \max \left\{ \begin{array}{c} 5.07326255554937 \\ 6.009419710337965 \\ 7.402626798270039 \\ 8.361354799395258 \\ 8.797455170122328 \\ \dots\dots\dots \\ 8.612475399765366 \\ 7.7370977108617645 \\ 5.982366259644978 \\ 4.24893534183932 \\ 4.0 \end{array} \right\} = 8.99999999999744, \quad x_2^0 = 19
\end{aligned}$$

3 Product 3

$$\varphi_3(1) = \max \{ 0.04086771438464032 \} = 0.04086771438464032, \quad x_3^0 = 1$$

$$\varphi_3(2) = \max \left\{ \begin{array}{c} 0.1141302699395772 \\ 1.237689509749511 \end{array} \right\} = 1.237689509749511, \quad x_3^0 = 2$$

$$\varphi_3(3) = \max \left\{ \begin{array}{c} 1.050287424722605 \\ 1.310952065304448 \\ 4.070414100580236 \end{array} \right\} = 4.070414100580236, \quad x_3^0 = 3$$

$$\varphi_3(4) = \max \left\{ \begin{array}{c} 2.4434945126546794 \\ 2.247109220087476 \\ 4.143676656135173 \\ 6.883584228929398 \end{array} \right\} = 6.883584228929398, \quad x_3^0 = 4$$

$$\varphi_3(5) = \max \left\{ \begin{array}{c} 3.8512279808013417 \\ 3.64031630801955 \\ 5.079833810918201 \\ 6.956846784484335 \\ 8.678555808025807 \end{array} \right\} = 8.678555808025807, \quad x_3^0 = 5$$

$$\varphi_3(6) = \max \left\{ \begin{array}{c} 4.787385135584369 \\ 5.048049776166213 \\ 6.473040898850275 \\ 7.893003939267363 \\ 8.751818363580744 \\ 9.532738107746297 \end{array} \right\} = 9.532738107746297, \quad x_3^0 = 6$$

$$\varphi_3(7) = \max \left\{ \begin{array}{c} 6.180592223516443 \\ 5.98420693094924 \\ 7.8807743669969375 \\ 9.286211027199437 \\ 9.687975518363771 \\ 9.606000663301234 \\ 9.858634583423848 \end{array} \right\} = 9.858634583423848, \quad x_3^0 = 7$$

$$\varphi_3(8) = \max \left\{ \begin{array}{c} 7.139320224641663 \\ 7.377414018881314 \\ 8.816931521779965 \\ 10.693944495346098 \\ 11.081182606295847 \\ 10.542157818084263 \\ 9.931897138978785 \\ 9.962672552713775 \end{array} \right\} = 11.081182606295847, \quad x_3^0 = 5$$

$$\begin{aligned}
\varphi_3(9) &= \max \left\{ \begin{array}{l} 8.014697913545266 \\ 8.336142020006534 \\ 10.21013860971204 \\ 11.630101650129127 \\ 12.488916074442509 \\ 11.935364906016336 \\ 10.868054293761812 \\ 10.035935108268712 \\ 9.991262142481807 \end{array} \right\} = 12.488916074442509, \quad x_3^0 = 5 \\
\varphi_3(10) &= \max \left\{ \begin{array}{l} 8.450798284272336 \\ 9.211519708910137 \\ 11.16886661083726 \\ 13.023308738061202 \\ 13.425073229225536 \\ 13.343098374162999 \\ 12.261261381693888 \\ 10.972092263051739 \\ 10.064524698036744 \\ 9.998163804408101 \end{array} \right\} = 13.425073229225536, \quad x_3^0 = 5 \\
\varphi_3(11) &= \max \left\{ \begin{array}{l} 8.744834111930858 \\ 9.647620079637207 \\ 12.04424429974086 \\ 13.982036739186421 \\ 14.818280317157612 \\ \dots\dots\dots \\ 13.66899484984055 \\ 12.365299350983815 \\ 11.00068185281977 \\ 10.071426359963038 \\ 9.999650038822914 \end{array} \right\} = 14.818280317157612, \quad x_3^0 = 5 \\
\varphi_3(12) &= \max \left\{ \begin{array}{l} 8.894290381987178 \\ 9.94165590729573 \\ 12.480344670467932 \\ 14.857414428090024 \\ 15.777008318282832 \\ \dots\dots\dots \\ 13.773032819130476 \\ 12.393888940751847 \\ 11.007583514746067 \\ 10.07291259437785 \\ 9.999938989595101 \end{array} \right\} = 15.777008318282832, \quad x_3^0 = 5
\end{aligned}$$

$$\begin{aligned}
\varphi_3(13) &= \max \left\{ \begin{array}{l} 8.969225247058791 \\ 10.091112177352048 \\ 12.774380498126455 \\ 15.293514798817093 \\ 16.652386007186433 \\ \dots\dots\dots \\ 13.801622408898508 \\ 12.40079060267814 \\ 11.00906974916088 \\ 10.073201545150038 \\ 9.999990200904154 \end{array} \right\} = 16.652386007186433, \quad x_3^0 = 5 \\
\varphi_3(14) &= \max \left\{ \begin{array}{l} 9.010471014985985 \\ 10.166047042423662 \\ 12.923836768182774 \\ 15.587550626475615 \\ 17.088486377913505 \\ \dots\dots\dots \\ 13.808524070824802 \\ 12.402276837092952 \\ 11.009358699933067 \\ 10.073252756459091 \\ 9.99999854110313 \end{array} \right\} = 17.50656830690692, \quad x_3^0 = 6 \\
\varphi_3(15) &= \max \left\{ \begin{array}{l} 9.025899411338548 \\ 10.207292810350856 \\ 12.998771633254385 \\ 15.737006896531934 \\ 17.382522205572023 \\ \dots\dots\dots \\ 13.810010305239615 \\ 12.40256578786514 \\ 11.00940991124212 \\ 10.073261096658067 \\ 9.99999797598543 \end{array} \right\} = 17.942668677633993, \quad x_3^0 = 6 \\
\varphi_3(16) &= \max \left\{ \begin{array}{l} 9.035444218343988 \\ 10.222721206703419 \\ 13.04001740118158 \\ 15.81194176160355 \\ 17.531978475628343 \\ \dots\dots\dots \\ 13.810299256011803 \\ 12.402616999174192 \\ 11.009418251441094 \\ 10.07326235315348 \\ 9.99999973712345 \end{array} \right\} = 18.268565153311542, \quad x_3^0 = 7
\end{aligned}$$

$$\begin{aligned}
\varphi_3(17) &= \max \left\{ \begin{array}{l} 9.038112523229936 \\ 10.232266013708859 \\ 13.055445797534144 \\ 15.853187529530743 \\ 17.606913340699958 \\ \dots\dots\dots \\ 13.810350467320855 \\ 12.40262533937317 \\ 11.009419507936506 \\ 10.073262529267282 \\ 9.999999996790809 \end{array} \right\} = 18.562600980970068, \quad x_3^0 = 7 \\
\varphi_3(18) &= \max \left\{ \begin{array}{l} 9.040016100280765 \\ 10.234934318594807 \\ 13.064990604539584 \\ 15.868615925883304 \\ 17.64815910862715 \\ \dots\dots\dots \\ 13.810358807519831 \\ 12.402626595868583 \\ 11.009419684050311 \\ 10.073262552345746 \\ 9.99999999630427 \end{array} \right\} = 18.712057251026387, \quad x_3^0 = 7 \\
\varphi_3(19) &= \max \left\{ \begin{array}{l} 9.040414216291403 \\ 10.236837895645635 \\ 13.067658909425532 \\ 15.878160732888745 \\ 17.663587504979716 \\ \dots\dots\dots \\ 13.810360064015244 \\ 12.402626771982384 \\ 11.009419707128774 \\ 10.07326255185364 \\ 9.99999999959723 \end{array} \right\} = 18.816095220316313, \quad x_3^0 = 8 \\
\varphi_3(20) &= \max \left\{ \begin{array}{l} 9.040747952536002 \\ 10.237236011656274 \\ 13.06956248647636 \\ 15.880829037774692 \\ 17.673132311985157 \\ \dots\dots\dots \\ 13.810360240129047 \\ 12.402626795060847 \\ 11.009419709968391 \\ 10.0732625551466 \\ 9.9999999995834 \end{array} \right\} = 18.891030085387925, \quad x_3^0 = 8
\end{aligned}$$

$$\begin{aligned}
\varphi_3(21) &= \max \left\{ \begin{array}{c} 9.040800203443784 \\ 10.237569747900872 \\ 13.069960602486997 \\ 15.882732614825521 \\ 17.6758006168711 \\ \dots\dots\dots \\ 13.81036026320751 \\ 12.402626797900467 \\ 11.009419710297689 \\ 10.073262555550771 \\ 9.99999999999959 \end{array} \right\} = 18.93227585331512, \quad x_3^0 = 8 \\
\varphi_3(22) &= \max \left\{ \begin{array}{c} 9.040852420237242 \\ 10.237621998808654 \\ 13.070294338731596 \\ 15.883130730836161 \\ 17.677704193921933 \\ \dots\dots\dots \\ 13.810360266047129 \\ 12.402626798229761 \\ 11.009419710333798 \\ 10.073262555554527 \\ 9.99999999999961 \end{array} \right\} = 18.96086544308315, \quad x_3^0 = 9 \\
\varphi_3(23) &= \max \left\{ \begin{array}{c} 9.040859798271551 \\ 10.237674215602112 \\ 13.070346589639378 \\ 15.88346446708076 \\ 17.67810230993257 \\ \dots\dots\dots \\ 13.810360266376424 \\ 12.402626798265874 \\ 11.009419710337554 \\ 10.073262555554898 \\ 9.99999999999996 \end{array} \right\} = 18.976293839435712, \quad x_3^0 = 9 \\
\varphi_3(24) &= \max \left\{ \begin{array}{c} 9.040865920916692 \\ 10.237681593636422 \\ 13.070398806432838 \\ 15.883516717988542 \\ 17.67843604617717 \\ \dots\dots\dots \\ 13.810360266412536 \\ 12.40262679826963 \\ 11.009419710337927 \\ 10.073262555554933 \\ 10.0 \end{array} \right\} = 18.985838646441152, \quad x_3^0 = 9
\end{aligned}$$

$$\begin{aligned}
\varphi_3(25) &= \max \left\{ \begin{array}{c} 9.040866871429333 \\ 10.237687716281563 \\ 13.070406184467146 \\ 15.883568934781998 \\ 17.67848829708495 \\ \dots\dots\dots \\ 13.810360266416291 \\ 12.40262679827 \\ 11.009419710337962 \\ 10.07326255554937 \\ 10.0 \end{array} \right\} = 18.99274030836745, \quad x_3^0 = 10 \\
\varphi_3(26) &= \max \left\{ \begin{array}{c} 9.040867519524033 \\ 10.237688666794204 \\ 13.070412307112289 \\ 15.88357631281631 \\ 17.67854051387841 \\ \dots\dots\dots \\ 13.810360266416662 \\ 12.402626798270035 \\ 11.009419710337966 \\ 10.07326255554937 \\ 10.0 \end{array} \right\} = 18.995408613253396, \quad x_3^0 = 10 \\
\varphi_3(27) &= \max \left\{ \begin{array}{c} 9.040867632062255 \\ 10.237689314888904 \\ 13.070413257624928 \\ 15.883582435461449 \\ 17.678547891912718 \\ \dots\dots\dots \\ 13.810360266416698 \\ 12.402626798270038 \\ 11.009419710337966 \\ 10.07326255554937 \\ 10.0 \end{array} \right\} = 18.997312190304225, \quad x_3^0 = 10 \\
\varphi_3(28) &= \max \left\{ \begin{array}{c} 9.040867694625442 \\ 10.237689427427126 \\ 13.07041390571963 \\ 15.883583385974092 \\ 17.67855401455786 \\ \dots\dots\dots \\ 13.810360266416701 \\ 12.402626798270038 \\ 11.009419710337966 \\ 10.07326255554937 \\ 10.0 \end{array} \right\} = 18.998798424719038, \quad x_3^0 = 11
\end{aligned}$$

$$\begin{aligned}
\varphi_3(29) &= \max \left\{ \begin{array}{c} 9.040867706952412 \\ 10.237689489990313 \\ 13.07041401825785 \\ 15.88358403406879 \\ 17.6785549650705 \\ \dots\dots\dots \\ 13.810360266416701 \\ 12.402626798270038 \\ 11.009419710337966 \\ 10.073262555554937 \\ 10.0 \end{array} \right\} = 18.999196540729677, \quad x_3^0 = 11 \\
\varphi_3(30) &= \max \left\{ \begin{array}{c} 9.040867712503706 \\ 10.237689502317282 \\ 13.070414080821038 \\ 15.883584146607014 \\ 17.6785556131652 \\ \dots\dots\dots \\ 13.810360266416701 \\ 12.402626798270038 \\ 11.009419710337966 \\ 10.073262555554937 \\ 10.0 \end{array} \right\} = 18.999530276974276, \quad x_3^0 = 11 \\
\varphi_3(31) &= \max \left\{ \begin{array}{c} 9.040867713759996 \\ 10.237689507868577 \\ 13.070414093148006 \\ 15.883584209170198 \\ 17.678555725703422 \\ \dots\dots\dots \\ 13.810360266416701 \\ 12.402626798270038 \\ 11.009419710337966 \\ 10.073262555554937 \\ 10.0 \end{array} \right\} = 18.999819227746464, \quad x_3^0 = 12 \\
\varphi_3(32) &= \max \left\{ \begin{array}{c} 9.040867714215757 \\ 10.237689509124866 \\ 13.070414098699302 \\ 15.88358422149717 \\ 17.678555788266607 \\ \dots\dots\dots \\ 13.810360266416701 \\ 12.402626798270038 \\ 11.009419710337966 \\ 10.073262555554937 \\ 10.0 \end{array} \right\} = 18.999871478654242, \quad x_3^0 = 12
\end{aligned}$$

$$\begin{aligned}
\varphi_3(33) &= \max \left\{ \begin{array}{c} 9.040867714335466 \\ 10.237689509580628 \\ 13.070414099955592 \\ 15.883584227048463 \\ 17.67855580059358 \\ \dots\dots\dots \\ 13.810360266416701 \\ 12.402626798270038 \\ 11.009419710337966 \\ 10.073262555554937 \\ 10.0 \end{array} \right\} = 18.999923695447702, \quad x_3^0 = 12 \\
\varphi_3(34) &= \max \left\{ \begin{array}{c} 9.040867714370284 \\ 10.237689509700337 \\ 13.070414100411352 \\ 15.883584228304752 \\ 17.67855580614487 \\ \dots\dots\dots \\ 13.810360266416701 \\ 12.402626798270038 \\ 11.009419710337966 \\ 10.073262555554937 \\ 10.0 \end{array} \right\} = 18.999974906756755, \quad x_3^0 = 13 \\
\varphi_3(35) &= \max \left\{ \begin{array}{c} 9.040867714380994 \\ 10.237689509735155 \\ 13.07041410053106 \\ 15.883584228760515 \\ 17.67855580740116 \\ \dots\dots\dots \\ 13.810360266416701 \\ 12.402626798270038 \\ 11.009419710337966 \\ 10.073262555554937 \\ 10.0 \end{array} \right\} = 18.99998324695573, \quad x_3^0 = 14 \\
\varphi_3(36) &= \max \left\{ \begin{array}{c} 9.04086771438348 \\ 10.237689509745865 \\ 13.07041410056588 \\ 15.883584228880224 \\ 17.678555807856924 \\ \dots\dots\dots \\ 13.810360266416701 \\ 12.402626798270038 \\ 11.009419710337966 \\ 10.073262555554937 \\ 10.0 \end{array} \right\} = 18.99999062499004, \quad x_3^0 = 14
\end{aligned}$$

4 Product 4

$$\begin{aligned}
\varphi_4(1) &= \max \{ 0.3982965469429116 \} = 0.3982965469429116, \quad x_4^0 = 1 \\
\varphi_4(2) &= \max \left\{ \begin{array}{c} 0.43916426132755193 \\ 3.171786015431965 \end{array} \right\} = 3.171786015431965, \quad x_4^0 = 2 \\
\varphi_4(3) &= \max \left\{ \begin{array}{c} 1.6359860566924227 \\ 3.2126537298166054 \\ 5.979356337378823 \end{array} \right\} = 5.979356337378823, \quad x_4^0 = 3 \\
\varphi_4(4) &= \max \left\{ \begin{array}{c} 4.468710647523148 \\ 4.409475525181476 \\ 6.0202240517634635 \\ 7.379960639624586 \end{array} \right\} = 7.379960639624586, \quad x_4^0 = 4 \\
\varphi_4(5) &= \max \left\{ \begin{array}{c} 7.28188077587231 \\ 7.242200116012201 \\ 7.217045847128334 \\ 7.420828354009226 \\ 7.8504179638782245 \end{array} \right\} = 7.8504179638782245, \quad x_4^0 = 5 \\
\varphi_4(6) &= \max \left\{ \begin{array}{c} 9.076852354968718 \\ 10.055370244361363 \\ 10.049770437959058 \\ 8.617650149374096 \\ 7.891285678262864 \\ 7.970313747992806 \end{array} \right\} = 10.055370244361363, \quad x_4^0 = 2 \\
\varphi_4(7) &= \max \left\{ \begin{array}{c} 9.93103465468921 \\ 11.850341823457772 \\ 12.862940566308222 \\ 11.450374740204822 \\ 9.088107473627735 \\ 8.011181462377447 \\ 7.994999182156907 \end{array} \right\} = 12.862940566308222, \quad x_4^0 = 3 \\
\varphi_4(8) &= \max \left\{ \begin{array}{c} 10.256931130366759 \\ 12.704524123178263 \\ 14.65791214540463 \\ 14.263544868553984 \\ 11.92083206445846 \\ 9.208003257742318 \\ 8.035866896541547 \\ 7.999268469974424 \end{array} \right\} = 14.65791214540463, \quad x_4^0 = 3
\end{aligned}$$

$$\begin{aligned}
\varphi_4(9) &= \max \left\{ \begin{array}{l} 11.47947915323876 \\ 13.030420598855812 \\ 15.51209444512512 \\ 16.058516447650394 \\ 14.734002192807623 \\ 12.040727848573042 \\ 9.232688691906418 \\ 8.040136184359064 \\ 7.999905455591442 \end{array} \right\} = 16.058516447650394, \quad x_4^0 = 4 \\
\varphi_4(10) &= \max \left\{ \begin{array}{l} 12.88721262138542 \\ 14.252968621727813 \\ 15.837990920802671 \\ 16.912698747370882 \\ 16.52897377190403 \\ 14.853897976922205 \\ 12.065413282737143 \\ 9.236957979723934 \\ 8.040773169976083 \\ 7.999989057043892 \end{array} \right\} = 16.912698747370882, \quad x_4^0 = 4 \\
\varphi_4(11) &= \max \left\{ \begin{array}{l} 13.823369776168448 \\ 15.660702089874473 \\ 17.060538943674672 \\ 17.238595223048435 \\ 17.383156071624523 \\ \dots\dots\dots \\ 14.878583411086305 \\ 12.06968257055466 \\ 9.237594965340953 \\ 8.040856771428532 \\ 7.999998853276119 \end{array} \right\} = 17.383156071624523, \quad x_4^0 = 5 \\
\varphi_4(12) &= \max \left\{ \begin{array}{l} 15.216576864100524 \\ 16.5968592446575 \\ 18.46827241182133 \\ 18.461143245920432 \\ 17.709052547302072 \\ \dots\dots\dots \\ 14.882852698903822 \\ 12.070319556171679 \\ 9.237678566793402 \\ 8.040866567660759 \\ 7.99999890227638 \end{array} \right\} = 18.46827241182133, \quad x_4^0 = 3
\end{aligned}$$

$$\begin{aligned}
\varphi_4(13) &= \max \left\{ \begin{array}{l} 16.175304865225744 \\ 17.990066332589578 \\ 19.404429566604357 \\ 19.868876714067095 \\ 18.931600570174073 \\ \dots\dots\dots \\ 14.883489684520839 \\ 12.070403157624128 \\ 9.23768836302563 \\ 8.040867604612279 \\ 7.999999990328738 \end{array} \right\} = 19.868876714067095, \quad x_4^0 = 4 \\
\varphi_4(14) &= \max \left\{ \begin{array}{l} 17.050682554129345 \\ 18.948794333714797 \\ 20.797636654536433 \\ 20.80503386885012 \\ 20.339334038320732 \\ \dots\dots\dots \\ 14.88357328597329 \\ 12.070412953856355 \\ 9.23768939997715 \\ 8.040867704713378 \\ 7.9999999921081 \end{array} \right\} = 20.80503386885012, \quad x_4^0 = 4 \\
\varphi_4(15) &= \max \left\{ \begin{array}{l} 17.904864853849833 \\ 19.8241720226184 \\ 21.756364655661656 \\ 22.198240956782197 \\ 21.27549119310376 \\ \dots\dots\dots \\ 14.883583082205517 \\ 12.070413990807875 \\ 9.237689500078249 \\ 8.04086771359545 \\ 7.999999999400275 \end{array} \right\} = 22.198240956782197, \quad x_4^0 = 4 \\
\varphi_4(16) &= \max \left\{ \begin{array}{l} 18.340965224576905 \\ 20.678354322338887 \\ 22.631742344565254 \\ 23.156968957907416 \\ 22.668698281035837 \\ \dots\dots\dots \\ 14.883584119157035 \\ 12.070414090908974 \\ 9.23768950896032 \\ 8.040867714324667 \\ 7.9999999995736 \end{array} \right\} = 23.156968957907416, \quad x_4^0 = 4
\end{aligned}$$

$$\begin{aligned}
\varphi_4(17) &= \max \left\{ \begin{array}{l} 18.666861700254454 \\ 21.11445469306596 \\ 23.485924644285745 \\ 24.032346646811018 \\ 23.627426282161057 \\ \dots\dots\dots \\ 14.883584219258136 \\ 12.070414099791046 \\ 9.237689509689538 \\ 8.040867714380376 \\ 7.999999999999715 \end{array} \right\} = 24.032346646811018, \quad x_4^0 = 4 \\
\varphi_4(18) &= \max \left\{ \begin{array}{l} 18.96089752791298 \\ 21.440351168743508 \\ 23.922025015012814 \\ 24.886528946531506 \\ 24.502803971064658 \\ \dots\dots\dots \\ 14.883584228140208 \\ 12.070414100520264 \\ 9.237689509745246 \\ 8.040867714384355 \\ 7.999999999999982 \end{array} \right\} = 24.886528946531506, \quad x_4^0 = 4 \\
\varphi_4(19) &= \max \left\{ \begin{array}{l} 19.1103537979693 \\ 21.734386996402034 \\ 24.247921490690366 \\ 25.322629317258578 \\ 25.356986270785146 \\ \dots\dots\dots \\ 14.883584228869426 \\ 12.070414100575972 \\ 9.237689509749226 \\ 8.040867714384623 \\ 7.999999999999999 \end{array} \right\} = 25.356986270785146, \quad x_4^0 = 5 \\
\varphi_4(20) &= \max \left\{ \begin{array}{l} 19.214391767259226 \\ 21.883843266458353 \\ 24.541957318348892 \\ 25.648525792936127 \\ 25.793086641512218 \\ \dots\dots\dots \\ 14.883584228925134 \\ 12.070414100579951 \\ 9.237689509749494 \\ 8.040867714384639 \\ 8.0 \end{array} \right\} = 25.793086641512218, \quad x_4^0 = 5
\end{aligned}$$

$$\begin{aligned}
\varphi_4(21) &= \max \left\{ \begin{array}{c} 19.289326632330837 \\ 21.98788123574828 \\ 24.69141358840521 \\ 25.942561620594653 \\ 26.118983117189767 \\ \dots\dots\dots \\ 14.883584228929113 \\ 12.07041410058022 \\ 9.23768950974951 \\ 8.04086771438464 \\ 8.0 \end{array} \right\} = 26.118983117189767, \quad x_4^0 = 5 \\
\varphi_4(22) &= \max \left\{ \begin{array}{c} 19.33057240025803 \\ 22.06281610081989 \\ 24.795451557695138 \\ 26.092017890650972 \\ 26.413018944848293 \\ \dots\dots\dots \\ 14.88358422892938 \\ 12.070414100580235 \\ 9.237689509749512 \\ 8.04086771438464 \\ 8.0 \end{array} \right\} = 26.413018944848293, \quad x_4^0 = 5 \\
\varphi_4(23) &= \max \left\{ \begin{array}{c} 19.359161990026063 \\ 22.104061868747085 \\ 24.87038642276675 \\ 26.1960558599409 \\ 26.562475214904612 \\ \dots\dots\dots \\ 14.883584228929397 \\ 12.070414100580237 \\ 9.237689509749512 \\ 8.04086771438464 \\ 8.0 \end{array} \right\} = 26.562475214904612, \quad x_4^0 = 5 \\
\varphi_4(24) &= \max \left\{ \begin{array}{c} 19.374590386378625 \\ 22.132651458515117 \\ 24.911632190693943 \\ 26.27099072501251 \\ 26.66651318419454 \\ \dots\dots\dots \\ 14.883584228929397 \\ 12.070414100580237 \\ 9.237689509749512 \\ 8.04086771438464 \\ 8.0 \end{array} \right\} = 26.68237099901919, \quad x_4^0 = 6
\end{aligned}$$

$$\begin{aligned}
\varphi_4(25) &= \max \left\{ \begin{array}{c} 19.384135193384065 \\ 22.148079854867678 \\ 24.940221780461975 \\ 26.312236492939704 \\ 26.74144804926615 \\ \dots\dots\dots \\ 14.883584228929397 \\ 12.070414100580237 \\ 9.237689509749512 \\ 8.04086771438464 \\ 8.0 \end{array} \right\} = 26.786408968309118, \quad x_4^0 = 6 \\
\varphi_4(26) &= \max \left\{ \begin{array}{c} 19.39103685531036 \\ 22.15762466187312 \\ 24.955650176814537 \\ 26.340826082707736 \\ 26.782693817193344 \\ \dots\dots\dots \\ 14.883584228929397 \\ 12.070414100580237 \\ 9.237689509749512 \\ 8.04086771438464 \\ 8.0 \end{array} \right\} = 26.86134383338073, \quad x_4^0 = 6 \\
\varphi_4(27) &= \max \left\{ \begin{array}{c} 19.39370516019631 \\ 22.164526323799414 \\ 24.965194983819977 \\ 26.356254479060297 \\ 26.811283406961376 \\ \dots\dots\dots \\ 14.883584228929397 \\ 12.070414100580237 \\ 9.237689509749512 \\ 8.04086771438464 \\ 8.0 \end{array} \right\} = 26.902589601307923, \quad x_4^0 = 6 \\
\varphi_4(28) &= \max \left\{ \begin{array}{c} 19.395608737247137 \\ 22.167194628685362 \\ 24.97209664574627 \\ 26.365799286065737 \\ 26.826711803313938 \\ \dots\dots\dots \\ 14.883584228929397 \\ 12.070414100580237 \\ 9.237689509749512 \\ 8.04086771438464 \\ 8.0 \end{array} \right\} = 26.931179191075955, \quad x_4^0 = 6
\end{aligned}$$

$$\begin{aligned}
\varphi_4(29) &= \max \left\{ \begin{array}{c} 19.39709497166195 \\ 22.16909820573619 \\ 24.97476495063222 \\ 26.372700947992033 \\ 26.836256610319378 \\ \dots\dots\dots \\ 14.883584228929397 \\ 12.070414100580237 \\ 9.237689509749512 \\ 8.04086771438464 \\ 8.0 \end{array} \right\} = 26.955864625240057, \quad x_4^0 = 7 \\
\varphi_4(30) &= \max \left\{ \begin{array}{c} 19.39749308767259 \\ 22.170584440151003 \\ 24.976668527683046 \\ 26.37536925287798 \\ 26.843158272245674 \\ \dots\dots\dots \\ 14.883584228929397 \\ 12.070414100580237 \\ 9.237689509749512 \\ 8.04086771438464 \\ 8.0 \end{array} \right\} = 26.97129302159262, \quad x_4^0 = 7 \\
\varphi_4(31) &= \max \left\{ \begin{array}{c} 19.39782682391719 \\ 22.170982556161643 \\ 24.97815476209786 \\ 26.37727282992881 \\ 26.84582657713162 \\ \dots\dots\dots \\ 14.883584228929397 \\ 12.070414100580237 \\ 9.237689509749512 \\ 8.04086771438464 \\ 8.0 \end{array} \right\} = 26.98083782859806, \quad x_4^0 = 7 \\
\varphi_4(32) &= \max \left\{ \begin{array}{c} 19.398115774689376 \\ 22.171316292406242 \\ 24.978552878108502 \\ 26.378759064343622 \\ 26.84773015418245 \\ \dots\dots\dots \\ 14.883584228929397 \\ 12.070414100580237 \\ 9.237689509749512 \\ 8.04086771438464 \\ 8.0 \end{array} \right\} = 26.987739490524355, \quad x_4^0 = 7
\end{aligned}$$

$$\begin{aligned}
\varphi_4(33) &= \max \left\{ \begin{array}{c} 19.398168025597155 \\ 22.17160524317843 \\ 24.9788866143531 \\ 26.379157180354262 \\ 26.849216388597263 \\ \dots\dots\dots \\ 14.883584228929397 \\ 12.070414100580237 \\ 9.237689509749512 \\ 8.04086771438464 \\ 8.0 \end{array} \right\} = 26.992008778341873, \quad x_4^0 = 8 \\
\varphi_4(34) &= \max \left\{ \begin{array}{c} 19.398220242390614 \\ 22.171657494086208 \\ 24.97917556512529 \\ 26.37949091659886 \\ 26.849614504607903 \\ \dots\dots\dots \\ 14.883584228929397 \\ 12.070414100580237 \\ 9.237689509749512 \\ 8.04086771438464 \\ 8.0 \end{array} \right\} = 26.99467708322782, \quad x_4^0 = 8 \\
\varphi_4(35) &= \max \left\{ \begin{array}{c} 19.398271453699667 \\ 22.171709710879668 \\ 24.979227816033067 \\ 26.37977986737105 \\ 26.849948240852502 \\ \dots\dots\dots \\ 14.883584228929397 \\ 12.070414100580237 \\ 9.237689509749512 \\ 8.04086771438464 \\ 8.0 \end{array} \right\} = 26.99658066027865, \quad x_4^0 = 8 \\
\varphi_4(36) &= \max \left\{ \begin{array}{c} 19.39827979389864 \\ 22.17176092218872 \\ 24.979280032826523 \\ 26.379832118278827 \\ 26.85023719162469 \\ \dots\dots\dots \\ 14.883584228929397 \\ 12.070414100580237 \\ 9.237689509749512 \\ 8.04086771438464 \\ 8.0 \end{array} \right\} = 26.998066894693462, \quad x_4^0 = 8
\end{aligned}$$

5 Product 5

$$\varphi_5(1) = \max \{ 0.0333269896147268 \} = 0.0333269896147268, \quad x_5^0 = 1$$

$$\varphi_5(2) = \max \left\{ \begin{array}{c} 0.4316235365576384 \\ 0.5990683577564593 \end{array} \right\} = 0.5990683577564593, \quad x_5^0 = 2$$

$$\varphi_5(3) = \max \left\{ \begin{array}{c} 3.205113005046692 \\ 0.9973649046993709 \\ 1.5934148156398198 \end{array} \right\} = 3.205113005046692, \quad x_5^0 = 1$$

$$\varphi_5(4) = \max \left\{ \begin{array}{c} 6.01268332699355 \\ 3.770854373188424 \\ 1.9917113625827314 \\ 2.3759339963119044 \end{array} \right\} = 6.01268332699355, \quad x_5^0 = 1$$

$$\varphi_5(5) = \max \left\{ \begin{array}{c} 7.413287629239313 \\ 6.578424695135282 \\ 4.765200831071785 \\ 2.774230543254816 \\ 2.7792147845592217 \end{array} \right\} = 7.413287629239313, \quad x_5^0 = 1$$

$$\varphi_5(6) = \max \left\{ \begin{array}{c} 7.883744953492951 \\ 7.979028997381045 \\ 7.572771153018643 \\ 5.54772001174387 \\ 3.1775113315021333 \\ 2.9352685756103423 \end{array} \right\} = 7.979028997381045, \quad x_5^0 = 2$$

$$\varphi_5(7) = \max \left\{ \begin{array}{c} 10.08869723397609 \\ 8.449486321634684 \\ 8.973375455264406 \\ 8.355290333690727 \\ 5.951000799991187 \\ 3.333565122553254 \\ 2.9838218493295816 \end{array} \right\} = 10.08869723397609, \quad x_5^0 = 1$$

$$\varphi_5(8) = \max \left\{ \begin{array}{c} 12.896267555922948 \\ 10.654438602117823 \\ 9.443832779518043 \\ 9.75589463593649 \\ 8.758571121938044 \\ 6.107054591042307 \\ 3.382118396272493 \\ 2.996479347099797 \end{array} \right\} = 12.896267555922948, \quad x_5^0 = 1$$

$$\begin{aligned}
\varphi_5(9) &= \max \left\{ \begin{array}{l} 14.691239135019357 \\ 13.462008924064682 \\ 11.648785060001183 \\ 10.22635196019013 \\ 10.159175424183807 \\ 8.914624912989165 \\ 6.155607864761547 \\ 3.3947758940427084 \\ 2.999321860051384 \end{array} \right\} = 14.691239135019357, \quad x_5^0 = 1 \\
\varphi_5(10) &= \max \left\{ \begin{array}{l} 16.09184343726512 \\ 15.25698050316109 \\ 14.456355381948041 \\ 12.431304240673267 \\ 10.629632748437446 \\ 10.315229215234929 \\ 8.963178186708404 \\ 6.168265362531762 \\ 3.3976184069942956 \\ 2.999882870640876 \end{array} \right\} = 16.09184343726512, \quad x_5^0 = 1 \\
\varphi_5(11) &= \max \left\{ \begin{array}{l} 16.94602573698561 \\ 16.657584805406852 \\ 16.251326961044448 \\ 15.238874562620126 \\ 12.834585028920586 \\ \dots\dots\dots \\ 10.363782488954168 \\ 8.97583568447862 \\ 6.171107875483349 \\ 3.398179417583788 \\ 2.999981666608582 \end{array} \right\} = 16.94602573698561, \quad x_5^0 = 1 \\
\varphi_5(12) &= \max \left\{ \begin{array}{l} 17.416483061239248 \\ 17.51176710512734 \\ 17.651931263290216 \\ 17.033846141716534 \\ 15.642155350867444 \\ \dots\dots\dots \\ 10.376439986724382 \\ 8.978678197430206 \\ 6.171668886072841 \\ 3.3982782135514937 \\ 2.999997376781244 \end{array} \right\} = 17.651931263290216, \quad x_5^0 = 3
\end{aligned}$$

$$\begin{aligned}
\varphi_5(13) &= \max \left\{ \begin{array}{l} 18.50159940143606 \\ 17.98222442938098 \\ 18.5061135630107 \\ 18.434450443962298 \\ 17.437126929963853 \\ \dots\dots\dots \\ 10.37928249967597 \\ 8.979239208019699 \\ 6.171767682040548 \\ 3.3982939237241556 \\ 2.9999996543655207 \end{array} \right\} = 18.5061135630107, \quad x_5^0 = 3 \\
\varphi_5(14) &= \max \left\{ \begin{array}{l} 19.90220370368182 \\ 19.06734076957779 \\ 18.976570887264344 \\ 19.288632743682786 \\ 18.837731232209617 \\ \dots\dots\dots \\ 10.379843510265463 \\ 8.979338003987404 \\ 6.171783392213209 \\ 3.3982962013084324 \\ 2.9999999578019034 \end{array} \right\} = 19.90220370368182, \quad x_5^0 = 1 \\
\varphi_5(15) &= \max \left\{ \begin{array}{l} 20.838360858464846 \\ 20.467945071823554 \\ 20.06168722746115 \\ 19.759090067936427 \\ 19.691913531930105 \\ \dots\dots\dots \\ 10.379942306233168 \\ 8.979353714160066 \\ 6.171785669797486 \\ 3.398296504744815 \\ 2.9999999952005854 \end{array} \right\} = 20.838360858464846, \quad x_5^0 = 1 \\
\varphi_5(16) &= \max \left\{ \begin{array}{l} 22.231567946396922 \\ 21.40410222660658 \\ 21.462291529706917 \\ 20.844206408133235 \\ 20.162370856183745 \\ \dots\dots\dots \\ 10.37995801640583 \\ 8.979355991744344 \\ 6.1717859732338685 \\ 3.398296542143497 \\ 2.999999994891113 \end{array} \right\} = 22.231567946396922, \quad x_5^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_5(17) &= \max \left\{ \begin{array}{l} 23.190295947522145 \\ 22.797309314538655 \\ 22.398448684489942 \\ 22.244810710379 \\ 21.247487196380554 \\ \dots\dots\dots \\ 10.379960293990106 \\ 8.979356295180725 \\ 6.17178601063255 \\ 3.398296546432023 \\ 2.99999999948893 \end{array} \right\} = 23.190295947522145, \quad x_5^0 = 1 \\
\varphi_5(18) &= \max \left\{ \begin{array}{l} 24.065673636425743 \\ 23.756037315663875 \\ 23.79165577242202 \\ 23.180967865162025 \\ 22.648091498626318 \\ \dots\dots\dots \\ 10.37996059742649 \\ 8.979356332579409 \\ 6.171786014921077 \\ 3.3982965468918045 \\ 2.99999999995178 \end{array} \right\} = 24.065673636425743, \quad x_5^0 = 1 \\
\varphi_5(19) &= \max \left\{ \begin{array}{l} 24.919855936146234 \\ 24.631415004567476 \\ 24.750383773547235 \\ 24.5741749530941 \\ 23.584248653409343 \\ \dots\dots\dots \\ 10.37996063482517 \\ 8.979356336867934 \\ 6.171786015380858 \\ 3.3982965469380897 \\ 2.99999999995697 \end{array} \right\} = 24.919855936146234, \quad x_5^0 = 1 \\
\varphi_5(20) &= \max \left\{ \begin{array}{l} 25.39031326039987 \\ 25.485597304287964 \\ 25.62576146245084 \\ 25.53290295421932 \\ 24.97745574134142 \\ \dots\dots\dots \\ 10.379960639113698 \\ 8.979356337327715 \\ 6.171786015427143 \\ 3.3982965469424813 \\ 2.99999999999636 \end{array} \right\} = 25.62576146245084, \quad x_5^0 = 3
\end{aligned}$$

$$\begin{aligned}
\varphi_5(21) &= \max \left\{ \begin{array}{l} 25.826413631126947 \\ 25.956054628541605 \\ 26.479943762171324 \\ 26.40828064312292 \\ 25.93618374246664 \\ \dots\dots\dots \\ 10.37996063957348 \\ 8.979356337374 \\ 6.171786015431534 \\ 3.398296546942875 \\ 2.999999999999997 \end{array} \right\} = 26.479943762171324, \quad x_5^0 = 3 \\
\varphi_5(22) &= \max \left\{ \begin{array}{l} 26.152310106804492 \\ 26.392154999268676 \\ 26.950401086424968 \\ 27.26246294284341 \\ 26.81156143137024 \\ \dots\dots\dots \\ 10.379960639619764 \\ 8.979356337378393 \\ 6.171786015431929 \\ 3.3982965469429085 \\ 2.999999999999996 \end{array} \right\} = 27.26246294284341, \quad x_5^0 = 4 \\
\varphi_5(23) &= \max \left\{ \begin{array}{l} 26.446345934463018 \\ 26.718051474946225 \\ 27.386501457152036 \\ 27.73292026709705 \\ 27.66574373109073 \\ \dots\dots\dots \\ 10.379960639624155 \\ 8.979356337378785 \\ 6.171786015431962 \\ 3.398296546942911 \\ 3.0 \end{array} \right\} = 27.73292026709705, \quad x_5^0 = 4 \\
\varphi_5(24) &= \max \left\{ \begin{array}{l} 26.595802204519337 \\ 27.01208730260475 \\ 27.71239793282959 \\ 28.169020637824122 \\ 28.13620105534437 \\ \dots\dots\dots \\ 10.37996063962455 \\ 8.97935633737882 \\ 6.171786015431964 \\ 3.3982965469429116 \\ 3.0 \end{array} \right\} = 28.169020637824122, \quad x_5^0 = 4
\end{aligned}$$

$$\begin{aligned}
\varphi_5(25) &= \max \left\{ \begin{array}{c} 26.71569798863392 \\ 27.16154357266107 \\ 28.006433760488115 \\ 28.49491711350167 \\ 28.57230142607144 \\ \dots\dots\dots \\ 10.379960639624583 \\ 8.979356337378823 \\ 6.171786015431965 \\ 3.3982965469429116 \\ 3.0 \end{array} \right\} = 28.57230142607144, \quad x_5^0 = 5 \\
\varphi_5(26) &= \max \left\{ \begin{array}{c} 26.819735957923847 \\ 27.28143935677565 \\ 28.155890030544434 \\ 28.788952941160197 \\ 28.89819790174899 \\ \dots\dots\dots \\ 10.379960639624585 \\ 8.979356337378823 \\ 6.171786015431965 \\ 3.3982965469429116 \\ 3.0 \end{array} \right\} = 28.89819790174899, \quad x_5^0 = 5 \\
\varphi_5(27) &= \max \left\{ \begin{array}{c} 26.894670822995458 \\ 27.385477326065576 \\ 28.27578581465901 \\ 28.938409211216516 \\ 29.192233729407516 \\ \dots\dots\dots \\ 10.379960639624585 \\ 8.979356337378823 \\ 6.171786015431965 \\ 3.3982965469429116 \\ 3.0 \end{array} \right\} = 29.192233729407516, \quad x_5^0 = 5 \\
\varphi_5(28) &= \max \left\{ \begin{array}{c} 26.935916590922652 \\ 27.460412191137188 \\ 28.379823783948936 \\ 29.058304995331095 \\ 29.341689999463835 \\ \dots\dots\dots \\ 10.379960639624585 \\ 8.979356337378823 \\ 6.171786015431965 \\ 3.3982965469429116 \\ 3.0 \end{array} \right\} = 29.348287520458634, \quad x_5^0 = 6
\end{aligned}$$

$$\begin{aligned}
\varphi_5(29) &= \max \left\{ \begin{array}{c} 26.964506180690684 \\ 27.50165795906438 \\ 28.454758649020548 \\ 29.162342964621022 \\ 29.461585783578414 \\ \dots\dots\dots \\ 10.379960639624585 \\ 8.979356337378823 \\ 6.171786015431965 \\ 3.3982965469429116 \\ 3.0 \end{array} \right\} = 29.497743790514953, \quad x_5^0 = 6 \\
\varphi_5(30) &= \max \left\{ \begin{array}{c} 26.989191614854782 \\ 27.530247548832413 \\ 28.49600441694774 \\ 29.237277829692633 \\ 29.56562375286834 \\ \dots\dots\dots \\ 10.379960639624585 \\ 8.979356337378823 \\ 6.171786015431965 \\ 3.3982965469429116 \\ 3.0 \end{array} \right\} = 29.617639574629536, \quad x_5^0 = 6 \\
\varphi_5(31) &= \max \left\{ \begin{array}{c} 27.004620011207344 \\ 27.554932982996515 \\ 28.524594006715773 \\ 29.278523597619827 \\ 29.640558617939952 \\ \dots\dots\dots \\ 10.379960639624585 \\ 8.979356337378823 \\ 6.171786015431965 \\ 3.3982965469429116 \\ 3.0 \end{array} \right\} = 29.721677543919462, \quad x_5^0 = 6 \\
\varphi_5(32) &= \max \left\{ \begin{array}{c} 27.014164818212784 \\ 27.570361379349077 \\ 28.54927944087988 \\ 29.30711318738786 \\ 29.681804385867146 \\ \dots\dots\dots \\ 10.379960639624585 \\ 8.979356337378823 \\ 6.171786015431965 \\ 3.3982965469429116 \\ 3.0 \end{array} \right\} = 29.796612408991074, \quad x_5^0 = 6
\end{aligned}$$

$$\begin{aligned}
\varphi_5(33) &= \max \left\{ \begin{array}{c} 27.021066480139083 \\ 27.579906186354517 \\ 28.56470783723244 \\ 29.33179862155196 \\ 29.710393975635178 \\ \dots\dots\dots \\ 10.379960639624585 \\ 8.979356337378823 \\ 6.171786015431965 \\ 3.3982965469429116 \\ 3.0 \end{array} \right\} = 29.84516568271031, \quad x_5^0 = 7 \\
\varphi_5(34) &= \max \left\{ \begin{array}{c} 27.025335767956598 \\ 27.586807848280813 \\ 28.57425264423788 \\ 29.347227017904522 \\ 29.73507940979928 \\ \dots\dots\dots \\ 10.379960639624585 \\ 8.979356337378823 \\ 6.171786015431965 \\ 3.3982965469429116 \\ 3.0 \end{array} \right\} = 29.886411450637503, \quad x_5^0 = 7 \\
\varphi_5(35) &= \max \left\{ \begin{array}{c} 27.02800407284255 \\ 27.59107713609833 \\ 28.581154306164173 \\ 29.356771824909963 \\ 29.75050780615184 \\ \dots\dots\dots \\ 10.379960639624585 \\ 8.979356337378823 \\ 6.171786015431965 \\ 3.3982965469429116 \\ 3.0 \end{array} \right\} = 29.915001040405535, \quad x_5^0 = 7 \\
\varphi_5(36) &= \max \left\{ \begin{array}{c} 27.029907649893374 \\ 27.59374544098428 \\ 28.585423593981695 \\ 29.36367348683626 \\ 29.76005261315728 \\ \dots\dots\dots \\ 10.379960639624585 \\ 8.979356337378823 \\ 6.171786015431965 \\ 3.3982965469429116 \\ 3.0 \end{array} \right\} = 29.93968647456964, \quad x_5^0 = 7
\end{aligned}$$

6 Product 6

$$\varphi_6(1) = \max \{ 0.5745949903672919 \} = 0.5745949903672919, \quad x_6^0 = 1$$

$$\varphi_6(2) = \max \left\{ \begin{array}{c} 0.6079219799820187 \\ 3.43647216567537 \end{array} \right\} = 3.43647216567537, \quad x_6^0 = 2$$

$$\varphi_6(3) = \max \left\{ \begin{array}{c} 1.173663348123751 \\ 3.469799155290097 \\ 5.734769709427136 \end{array} \right\} = 5.734769709427136, \quad x_6^0 = 3$$

$$\varphi_6(4) = \max \left\{ \begin{array}{c} 3.779707995413984 \\ 4.03554052343183 \\ 5.7680966990418625 \\ 6.673462611694449 \end{array} \right\} = 6.673462611694449, \quad x_6^0 = 4$$

$$\varphi_6(5) = \max \left\{ \begin{array}{c} 6.587278317360841 \\ 6.6415851707220614 \\ 6.333838067183595 \\ 6.7067896013091755 \\ 6.933983495417143 \end{array} \right\} = 6.933983495417143, \quad x_6^0 = 5$$

$$\varphi_6(6) = \max \left\{ \begin{array}{c} 7.987882619606604 \\ 9.44915549266892 \\ 8.939882714473828 \\ 7.272530969450908 \\ 6.96731048503187 \\ 6.989040647943918 \end{array} \right\} = 9.44915549266892, \quad x_6^0 = 2$$

$$\varphi_6(7) = \max \left\{ \begin{array}{c} 8.553623987748336 \\ 10.849759794914682 \\ 11.747453036420685 \\ 9.878575616741141 \\ 7.533051853173602 \\ 7.022367637558645 \\ 6.9984573643335555 \end{array} \right\} = 11.747453036420685, \quad x_6^0 = 3$$

$$\varphi_6(8) = \max \left\{ \begin{array}{c} 10.663292224343381 \\ 11.415501163056415 \\ 13.148057338666447 \\ 12.686145938687998 \\ 10.139096500463836 \\ 7.588109005700377 \\ 7.031784353948282 \\ 6.999811567498234 \end{array} \right\} = 13.148057338666447, \quad x_6^0 = 3$$

$$\begin{aligned}
\varphi_6(9) &= \max \left\{ \begin{array}{l} 13.47086254629024 \\ 13.52516939965146 \\ 13.71379870680818 \\ 14.08675024093376 \\ 12.946666822410693 \\ 10.194153652990611 \\ 7.5975257220900145 \\ 7.033138557112961 \\ 6.999979673352695 \end{array} \right\} = 14.08675024093376, \quad x_6^0 = 4 \\
\varphi_6(10) &= \max \left\{ \begin{array}{l} 15.265834125386649 \\ 16.33273972159832 \\ 15.823466943403226 \\ 14.652491609075494 \\ 14.347271124656455 \\ 13.001723974937468 \\ 10.203570369380248 \\ 7.5988799252546935 \\ 7.033306662967422 \\ 6.999998036938562 \end{array} \right\} = 16.33273972159832, \quad x_6^0 = 2 \\
\varphi_6(11) &= \max \left\{ \begin{array}{l} 16.66643842763241 \\ 18.127711300694727 \\ 18.631037265350084 \\ 16.76215984567054 \\ 14.913012492798188 \\ \dots\dots\dots \\ 13.011140691327105 \\ 10.204924572544925 \\ 7.599048031109154 \\ 7.033325026553289 \\ 6.9999998283958975 \end{array} \right\} = 18.631037265350084, \quad x_6^0 = 3 \\
\varphi_6(12) &= \max \left\{ \begin{array}{l} 17.520620727352902 \\ 19.528315602940488 \\ 20.426008844446493 \\ 19.569730167617397 \\ 17.022680729393233 \\ \dots\dots\dots \\ 13.012494894491784 \\ 10.205092678399387 \\ 7.599066394695021 \\ 7.033326818010624 \\ 6.999999986298867 \end{array} \right\} = 20.426008844446493, \quad x_6^0 = 3
\end{aligned}$$

$$\begin{aligned}
\varphi_6(13) &= \max \left\{ \begin{array}{l} 18.226526253657507 \\ 20.38249790266098 \\ 21.826613146692253 \\ 21.364701746713806 \\ 19.830251051340092 \\ \dots\dots\dots \\ 13.012663000346244 \\ 10.205111041985255 \\ 7.599068186152357 \\ 7.033326975913594 \\ 6.999999998993338 \end{array} \right\} = 21.826613146692253, \quad x_6^0 = 3 \\
\varphi_6(14) &= \max \left\{ \begin{array}{l} 19.080708553377992 \\ 21.088403428965584 \\ 22.680795446412745 \\ 22.765306048959566 \\ 21.6252226304365 \\ \dots\dots\dots \\ 13.012681363932112 \\ 10.20511283344259 \\ 7.599068344055326 \\ 7.0333269886080645 \\ 6.99999999931503 \end{array} \right\} = 22.765306048959566, \quad x_6^0 = 4 \\
\varphi_6(15) &= \max \left\{ \begin{array}{l} 20.476798694049112 \\ 21.94258572868607 \\ 23.38670097271735 \\ 23.619488348680058 \\ 23.025826932682264 \\ \dots\dots\dots \\ 13.012683155389446 \\ 10.205112991345558 \\ 7.599068356749797 \\ 7.03332698954623 \\ 6.99999999956595 \end{array} \right\} = 23.619488348680058, \quad x_6^0 = 4 \\
\varphi_6(16) &= \max \left\{ \begin{array}{l} 21.412955848832137 \\ 23.33867586935719 \\ 24.240883272437834 \\ 24.325393874984663 \\ 23.880009232402756 \\ \dots\dots\dots \\ 13.012683313292417 \\ 10.20511300404003 \\ 7.599068357687962 \\ 7.033326989610386 \\ 6.9999999999742 \end{array} \right\} = 24.325393874984663, \quad x_6^0 = 4
\end{aligned}$$

$$\begin{aligned}
\varphi_6(17) &= \max \left\{ \begin{array}{c} 22.806162936764213 \\ 24.274833024140214 \\ 25.636973413108954 \\ 25.179576174705147 \\ 24.58591475870736 \\ \dots\dots\dots \\ 13.012683325986888 \\ 10.205113004978195 \\ 7.5990683577521185 \\ 7.033326989614469 \\ 6.999999999999986 \end{array} \right\} = 25.636973413108954, \quad x_6^0 = 3 \\
\varphi_6(18) &= \max \left\{ \begin{array}{c} 23.764890937889437 \\ 25.66804011207229 \\ 26.57313056789198 \\ 26.575666315376267 \\ 25.440097058427845 \\ \dots\dots\dots \\ 13.012683326925053 \\ 10.205113005042351 \\ 7.5990683577562015 \\ 7.033326989614713 \\ 6.999999999999999 \end{array} \right\} = 26.575666315376267, \quad x_6^0 = 4 \\
\varphi_6(19) &= \max \left\{ \begin{array}{c} 24.640268626793034 \\ 26.626768113197514 \\ 27.966337655824056 \\ 27.511823470159293 \\ 26.836187199098966 \\ \dots\dots\dots \\ 13.012683326989208 \\ 10.205113005046435 \\ 7.599068357756445 \\ 7.033326989614726 \\ 7.0 \end{array} \right\} = 27.966337655824056, \quad x_6^0 = 3 \\
\varphi_6(20) &= \max \left\{ \begin{array}{c} 25.494450926513526 \\ 27.50214580210111 \\ 28.92506565694928 \\ 28.90503055809137 \\ 27.77234435388199 \\ \dots\dots\dots \\ 13.012683326993292 \\ 10.205113005046677 \\ 7.599068357756458 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 28.92506565694928, \quad x_6^0 = 3
\end{aligned}$$

$$\begin{aligned}
\varphi_6(21) &= \max \left\{ \begin{array}{c} 26.20035645281813 \\ 28.356328101821603 \\ 29.800443345852877 \\ 29.863758559216592 \\ 29.165551441814067 \\ \dots\dots\dots \\ 13.012683326993535 \\ 10.205113005046691 \\ 7.599068357756459 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 29.863758559216592, \quad x_6^0 = 4 \\
\varphi_6(22) &= \max \left\{ \begin{array}{c} 27.054538752538615 \\ 29.062233628126208 \\ 30.65462564557337 \\ 30.73913624812019 \\ 30.12427944293929 \\ \dots\dots\dots \\ 13.01268332699355 \\ 10.205113005046691 \\ 7.599068357756459 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 30.73913624812019, \quad x_6^0 = 4 \\
\varphi_6(23) &= \max \left\{ \begin{array}{c} 27.8370579332107 \\ 29.916415927846693 \\ 31.360531171877973 \\ 31.59331854784068 \\ 30.999657131842888 \\ \dots\dots\dots \\ 13.01268332699355 \\ 10.205113005046691 \\ 7.599068357756459 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 31.59331854784068, \quad x_6^0 = 4 \\
\varphi_6(24) &= \max \left\{ \begin{array}{c} 28.307515257464342 \\ 30.69893510851878 \\ 32.21471347159846 \\ 32.299224074145286 \\ 31.85383943156338 \\ \dots\dots\dots \\ 13.01268332699355 \\ 10.205113005046691 \\ 7.599068357756459 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 32.299224074145286, \quad x_6^0 = 4
\end{aligned}$$

$$\begin{aligned}
\varphi_6(25) &= \max \left\{ \begin{array}{c} 28.743615628191414 \\ 31.16939243277242 \\ 32.99723265227055 \\ 33.15340637386577 \\ 32.559744957867984 \\ \dots\dots\dots \\ 13.01268332699355 \\ 10.205113005046691 \\ 7.599068357756459 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 33.15340637386577, \quad x_6^0 = 4 \\
\varphi_6(26) &= \max \left\{ \begin{array}{c} 29.146896416438732 \\ 31.60549280349949 \\ 33.467689976524184 \\ 33.93592555453786 \\ 33.41392725758847 \\ \dots\dots\dots \\ 13.01268332699355 \\ 10.205113005046691 \\ 7.599068357756459 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 33.93592555453786, \quad x_6^0 = 4 \\
\varphi_6(27) &= \max \left\{ \begin{array}{c} 29.47279289211628 \\ 32.00877359174681 \\ 33.90379034725126 \\ 34.4063828787915 \\ 34.19644643826055 \\ \dots\dots\dots \\ 13.01268332699355 \\ 10.205113005046691 \\ 7.599068357756459 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 34.4063828787915, \quad x_6^0 = 4 \\
\varphi_6(28) &= \max \left\{ \begin{array}{c} 29.766828719774807 \\ 32.33467006742436 \\ 34.307071135498575 \\ 34.84248324951857 \\ 34.666903762514195 \\ \dots\dots\dots \\ 13.01268332699355 \\ 10.205113005046691 \\ 7.599068357756459 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 34.84248324951857, \quad x_6^0 = 4
\end{aligned}$$

$$\begin{aligned}
\varphi_6(29) &= \max \left\{ \begin{array}{c} 29.922882510825925 \\ 32.62870589508289 \\ 34.63296761117613 \\ 35.24576403776589 \\ 35.103004133241264 \\ \dots\dots\dots \\ 13.01268332699355 \\ 10.205113005046691 \\ 7.599068357756459 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 35.24576403776589, \quad x_6^0 = 4 \\
\varphi_6(30) &= \max \left\{ \begin{array}{c} 30.072338780882244 \\ 32.784759686134 \\ 34.92700343883465 \\ 35.57166051344344 \\ 35.506284921488586 \\ \dots\dots\dots \\ 13.01268332699355 \\ 10.205113005046691 \\ 7.599068357756459 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 35.57166051344344, \quad x_6^0 = 4 \\
\varphi_6(31) &= \max \left\{ \begin{array}{c} 30.192234564996827 \\ 32.93421595619032 \\ 35.08305722988577 \\ 35.865696341101966 \\ 35.83218139716613 \\ \dots\dots\dots \\ 13.01268332699355 \\ 10.205113005046691 \\ 7.599068357756459 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 35.865696341101966, \quad x_6^0 = 4 \\
\varphi_6(32) &= \max \left\{ \begin{array}{c} 30.296272534286754 \\ 33.054111740304904 \\ 35.23251349994209 \\ 36.02175013215308 \\ 36.12621722482466 \\ \dots\dots\dots \\ 13.01268332699355 \\ 10.205113005046691 \\ 7.599068357756459 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 36.12621722482466, \quad x_6^0 = 5
\end{aligned}$$

$$\begin{aligned}
\varphi_6(33) &= \max \left\{ \begin{array}{c} 30.371207399358365 \\ 33.15814970959483 \\ 35.35240928405667 \\ 36.1712064022094 \\ 36.28227101587578 \\ \dots\dots\dots \\ 13.01268332699355 \\ 10.205113005046691 \\ 7.599068357756459 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 36.28227101587578, \quad x_6^0 = 5 \\
\varphi_6(34) &= \max \left\{ \begin{array}{c} 30.4197606730776 \\ 33.23308457466644 \\ 35.456447253346596 \\ 36.29110218632398 \\ 36.4317272859321 \\ \dots\dots\dots \\ 13.01268332699355 \\ 10.205113005046691 \\ 7.599068357756459 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 36.4317272859321, \quad x_6^0 = 5 \\
\varphi_6(35) &= \max \left\{ \begin{array}{c} 30.461006441004795 \\ 33.28163784838568 \\ 35.53138211841821 \\ 36.39514015561391 \\ 36.55162307004668 \\ \dots\dots\dots \\ 13.01268332699355 \\ 10.205113005046691 \\ 7.599068357756459 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 36.55162307004668, \quad x_6^0 = 5 \\
\varphi_6(36) &= \max \left\{ \begin{array}{c} 30.489596030772827 \\ 33.32288361631287 \\ 35.57993539213744 \\ 36.47007502068552 \\ 36.65566103933661 \\ \dots\dots\dots \\ 13.01268332699355 \\ 10.205113005046691 \\ 7.599068357756459 \\ 7.033326989614727 \\ 7.0 \end{array} \right\} = 36.65566103933661, \quad x_6^0 = 5
\end{aligned}$$

7 Product 7

$$\varphi_7(1) = \max \{ 0.03663127777746844 \} = 0.03663127777746844, \quad x_7^0 = 1$$

$$\varphi_7(2) = \max \left\{ \begin{array}{c} 0.6112262681447603 \\ 0.5047098551689824 \end{array} \right\} = 0.6112262681447603, \quad x_7^0 = 1$$

$$\varphi_7(3) = \max \left\{ \begin{array}{c} 3.4731034434528385 \\ 1.0793048455362744 \\ 1.2013133991350196 \end{array} \right\} = 3.4731034434528385, \quad x_7^0 = 1$$

$$\varphi_7(4) = \max \left\{ \begin{array}{c} 5.771400987204604 \\ 3.9411820208443524 \\ 1.7759083895023116 \\ 1.6806773996976294 \end{array} \right\} = 5.771400987204604, \quad x_7^0 = 1$$

$$\varphi_7(5) = \max \left\{ \begin{array}{c} 6.710093889471917 \\ 6.2394795645961185 \\ 4.63778556481039 \\ 2.2552723900649214 \\ 1.898727585061164 \end{array} \right\} = 6.710093889471917, \quad x_7^0 = 1$$

$$\varphi_7(6) = \max \left\{ \begin{array}{c} 6.970614773194612 \\ 7.1781724668634315 \\ 6.936083108562155 \\ 5.1171495653729995 \\ 2.473322575428456 \\ 1.9734557200893232 \end{array} \right\} = 7.1781724668634315, \quad x_7^0 = 2$$

$$\varphi_7(7) = \max \left\{ \begin{array}{c} 9.485786770446389 \\ 7.438693350586126 \\ 7.874776010829468 \\ 7.415447109124765 \\ 5.335199750736534 \\ 2.5480507104566152 \\ 1.99407860405292 \end{array} \right\} = 9.485786770446389, \quad x_7^0 = 1$$

$$\varphi_7(8) = \max \left\{ \begin{array}{c} 11.784084314198154 \\ 9.953865347837903 \\ 8.135296894552162 \\ 8.354140011392078 \\ 7.6334972944883 \\ 5.409927885764693 \\ 2.5686735944202117 \\ 1.9988510075556407 \end{array} \right\} = 11.784084314198154, \quad x_7^0 = 1$$

$$\begin{aligned}
\varphi_7(9) &= \max \left\{ \begin{array}{l} 13.184688616443916 \\ 12.252162891589668 \\ 10.65046889180394 \\ 8.614660895114772 \\ 8.572190196755614 \\ 7.7082254295164585 \\ 5.43055076972829 \\ 2.5734459979229327 \\ 1.999802796081055 \end{array} \right\} = 13.184688616443916, \quad x_7^0 = 1 \\
\varphi_7(10) &= \max \left\{ \begin{array}{l} 14.123381518711229 \\ 13.65276719383543 \\ 12.94876643555704 \\ 11.129832892366549 \\ 8.832711080478308 \\ 8.646918331783771 \\ 7.728848313480055 \\ 5.43532317323101 \\ 2.5743977864483467 \\ 1.9999696642033549 \end{array} \right\} = 14.123381518711229, \quad x_7^0 = 1 \\
\varphi_7(11) &= \max \left\{ \begin{array}{l} 16.36937099937579 \\ 14.591460096102743 \\ 14.349370737801467 \\ 13.428130436118314 \\ 11.347883077730085 \\ \dots\dots\dots \\ 8.667541215747368 \\ 7.733620716982776 \\ 5.436274961756425 \\ 2.5745646545706466 \\ 1.999995772600084 \end{array} \right\} = 16.36937099937579, \quad x_7^0 = 1 \\
\varphi_7(12) &= \max \left\{ \begin{array}{l} 18.667668543127554 \\ 16.837449576767302 \\ 15.28806364006878 \\ 14.828734738364076 \\ 13.64618062148185 \\ \dots\dots\dots \\ 8.67231361925009 \\ 7.734572505508191 \\ 5.436441829878725 \\ 2.574590762967376 \\ 1.9999994616172387 \end{array} \right\} = 18.667668543127554, \quad x_7^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_7(13) &= \max \left\{ \begin{array}{l} 20.46264012222396 \\ 19.135747120519067 \\ 17.53405312073334 \\ 15.76742764063139 \\ 15.04678492372761 \\ \dots\dots\dots \\ 8.673265407775503 \\ 7.73473937363049 \\ 5.436467938275454 \\ 2.5745944519845305 \\ 1.9999999368735588 \end{array} \right\} = 20.46264012222396, \quad x_7^0 = 1 \\
\varphi_7(14) &= \max \left\{ \begin{array}{l} 21.86324442446972 \\ 20.930718699615475 \\ 19.832350664485105 \\ 18.013417121295948 \\ 15.985477825994924 \\ \dots\dots\dots \\ 8.673432275897804 \\ 7.734765482027219 \\ 5.436471627292609 \\ 2.5745949272408506 \\ 1.99999999314267 \end{array} \right\} = 21.86324442446972, \quad x_7^0 = 1 \\
\varphi_7(15) &= \max \left\{ \begin{array}{l} 22.801937326737033 \\ 22.331323001861236 \\ 21.627322243581514 \\ 20.311714665047713 \\ 18.231467306659482 \\ \dots\dots\dots \\ 8.673458384294532 \\ 7.734769171044374 \\ 5.436472102548929 \\ 2.5745949835099617 \\ 1.999999993061548 \end{array} \right\} = 22.801937326737033, \quad x_7^0 = 1 \\
\varphi_7(16) &= \max \left\{ \begin{array}{l} 23.656119626457524 \\ 23.27001590412855 \\ 23.027926545827274 \\ 22.10668624414412 \\ 20.529764850411247 \\ \dots\dots\dots \\ 8.673462073311688 \\ 7.734769646300695 \\ 5.43647215881804 \\ 2.5745949896734466 \\ 1.99999999342997 \end{array} \right\} = 23.656119626457524, \quad x_7^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_7(17) &= \max \left\{ \begin{array}{l} 24.36202515276213 \\ 24.12419820384904 \\ 23.966619448094587 \\ 23.507290546389882 \\ 22.324736429507656 \\ \dots\dots\dots \\ 8.673462548568008 \\ 7.734769702569806 \\ 5.436472164981525 \\ 2.5745949903015917 \\ 1.99999999994154 \end{array} \right\} = 24.36202515276213, \quad x_7^0 = 1 \\
\varphi_7(18) &= \max \left\{ \begin{array}{l} 25.67360469088642 \\ 24.830103730153645 \\ 24.82080174781508 \\ 24.445983448657195 \\ 23.725340731753416 \\ \dots\dots\dots \\ 8.673462604837118 \\ 7.734769708733291 \\ 5.43647216560967 \\ 2.574594990361446 \\ 1.99999999995095 \end{array} \right\} = 25.67360469088642, \quad x_7^0 = 1 \\
\varphi_7(19) &= \max \left\{ \begin{array}{l} 26.612297593153734 \\ 26.141683268277937 \\ 25.526707274119683 \\ 25.300165748377687 \\ 24.66403363402073 \\ \dots\dots\dots \\ 8.673462611000604 \\ 7.734769709361435 \\ 5.4364721656695245 \\ 2.5745949903668013 \\ 1.99999999999611 \end{array} \right\} = 26.612297593153734, \quad x_7^0 = 1 \\
\varphi_7(20) &= \max \left\{ \begin{array}{l} 28.002968933601522 \\ 27.08037617054525 \\ 26.838286812243975 \\ 26.00607127468229 \\ 25.51821593374122 \\ \dots\dots\dots \\ 8.673462611628748 \\ 7.73476970942129 \\ 5.436472165674879 \\ 2.574594990367253 \\ 1.99999999999971 \end{array} \right\} = 28.002968933601522, \quad x_7^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_7(21) &= \max \left\{ \begin{array}{c} 28.961696934726746 \\ 28.47104751099304 \\ 27.776979714511288 \\ 27.317650812806583 \\ 26.224121460045826 \\ \dots\dots\dots \\ 8.673462611688603 \\ 7.734769709426645 \\ 5.436472165675331 \\ 2.574594990367289 \\ 1.9999999999999998 \end{array} \right\} = 28.961696934726746, \quad x_7^0 = 1 \\
\varphi_7(22) &= \max \left\{ \begin{array}{c} 29.90038983699406 \\ 29.429775512118262 \\ 29.167651054959077 \\ 28.256343715073896 \\ 27.535700998170118 \\ \dots\dots\dots \\ 8.673462611693958 \\ 7.734769709427097 \\ 5.436472165675367 \\ 2.5745949903672916 \\ 2.0 \end{array} \right\} = 29.90038983699406, \quad x_7^0 = 1 \\
\varphi_7(23) &= \max \left\{ \begin{array}{c} 30.775767525897656 \\ 30.368468414385575 \\ 30.1263790560843 \\ 29.647015055521685 \\ 28.47439390043743 \\ \dots\dots\dots \\ 8.67346261169441 \\ 7.734769709427133 \\ 5.43647216567537 \\ 2.574594990367292 \\ 2.0 \end{array} \right\} = 30.775767525897656, \quad x_7^0 = 1 \\
\varphi_7(24) &= \max \left\{ \begin{array}{c} 31.629949825618148 \\ 31.243846103289172 \\ 31.065071958351613 \\ 30.605743056646908 \\ 29.86506524088522 \\ \dots\dots\dots \\ 8.673462611694445 \\ 7.734769709427136 \\ 5.4364721656753705 \\ 2.574594990367292 \\ 2.0 \end{array} \right\} = 31.629949825618148, \quad x_7^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_7(25) &= \max \left\{ \begin{array}{c} 32.33585535192275 \\ 32.098028403009664 \\ 31.94044964725521 \\ 31.54443595891422 \\ 30.823793242010442 \\ \dots\dots\dots \\ 8.673462611694449 \\ 7.734769709427136 \\ 5.4364721656753705 \\ 2.574594990367292 \\ 2.0 \end{array} \right\} = 32.33585535192275, \quad x_7^0 = 1 \\
\varphi_7(26) &= \max \left\{ \begin{array}{c} 33.19003765164324 \\ 32.80393392931427 \\ 32.7946319469757 \\ 32.41981364781782 \\ 31.762486144277755 \\ \dots\dots\dots \\ 8.673462611694449 \\ 7.734769709427136 \\ 5.4364721656753705 \\ 2.574594990367292 \\ 2.0 \end{array} \right\} = 33.19003765164324, \quad x_7^0 = 1 \\
\varphi_7(27) &= \max \left\{ \begin{array}{c} 33.97255683231533 \\ 33.65811622903475 \\ 33.5005374732803 \\ 33.27399594753831 \\ 32.637863833181356 \\ \dots\dots\dots \\ 8.673462611694449 \\ 7.734769709427136 \\ 5.4364721656753705 \\ 2.574594990367292 \\ 2.0 \end{array} \right\} = 33.97255683231533, \quad x_7^0 = 1 \\
\varphi_7(28) &= \max \left\{ \begin{array}{c} 34.443014156568964 \\ 34.44063540970684 \\ 34.35471977300079 \\ 33.979901473842915 \\ 33.49204613290185 \\ \dots\dots\dots \\ 8.673462611694449 \\ 7.734769709427136 \\ 5.4364721656753705 \\ 2.574594990367292 \\ 2.0 \end{array} \right\} = 34.443014156568964, \quad x_7^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_7(29) &= \max \left\{ \begin{array}{c} 34.87911452729604 \\ 34.91109273396048 \\ 35.13723895367288 \\ 34.8340837735634 \\ 34.19795165920645 \\ \dots\dots\dots \\ 8.673462611694449 \\ 7.734769709427136 \\ 5.4364721656753705 \\ 2.574594990367292 \\ 2.0 \end{array} \right\} = 35.13723895367288, \quad x_7^0 = 3 \\
\varphi_7(30) &= \max \left\{ \begin{array}{c} 35.282395315543354 \\ 35.347193104687555 \\ 35.607696277926514 \\ 35.61660295423549 \\ 35.05213395892694 \\ \dots\dots\dots \\ 8.673462611694449 \\ 7.734769709427136 \\ 5.4364721656753705 \\ 2.574594990367292 \\ 2.0 \end{array} \right\} = 35.61660295423549, \quad x_7^0 = 4 \\
\varphi_7(31) &= \max \left\{ \begin{array}{c} 35.60829179122091 \\ 35.75047389293487 \\ 36.04379664865359 \\ 36.087060278489126 \\ 35.83465313959903 \\ \dots\dots\dots \\ 8.673462611694449 \\ 7.734769709427136 \\ 5.4364721656753705 \\ 2.574594990367292 \\ 2.0 \end{array} \right\} = 36.087060278489126, \quad x_7^0 = 4 \\
\varphi_7(32) &= \max \left\{ \begin{array}{c} 35.90232761887943 \\ 36.07637036861242 \\ 36.447077436900905 \\ 36.5231606492162 \\ 36.305110463852664 \\ \dots\dots\dots \\ 8.673462611694449 \\ 7.734769709427136 \\ 5.4364721656753705 \\ 2.574594990367292 \\ 2.0 \end{array} \right\} = 36.5231606492162, \quad x_7^0 = 4
\end{aligned}$$

$$\begin{aligned}
\varphi_7(33) &= \max \left\{ \begin{array}{c} 36.162848502602124 \\ 36.37040619627095 \\ 36.77297391257846 \\ 36.92644143746352 \\ 36.74121083457974 \\ \dots\dots\dots \\ 8.673462611694449 \\ 7.734769709427136 \\ 5.4364721656753705 \\ 2.574594990367292 \\ 2.0 \end{array} \right\} = 36.92644143746352, \quad x_7^0 = 4 \\
\varphi_7(34) &= \max \left\{ \begin{array}{c} 36.318902293653245 \\ 36.63092707999364 \\ 37.06700974023698 \\ 37.25233791314107 \\ 37.144491622827054 \\ \dots\dots\dots \\ 8.673462611694449 \\ 7.734769709427136 \\ 5.4364721656753705 \\ 2.574594990367292 \\ 2.0 \end{array} \right\} = 37.25233791314107, \quad x_7^0 = 4 \\
\varphi_7(35) &= \max \left\{ \begin{array}{c} 36.468358563709565 \\ 36.78698087104476 \\ 37.327530623959674 \\ 37.546373740799595 \\ 37.47038809850461 \\ \dots\dots\dots \\ 8.673462611694449 \\ 7.734769709427136 \\ 5.4364721656753705 \\ 2.574594990367292 \\ 2.0 \end{array} \right\} = 37.546373740799595, \quad x_7^0 = 4 \\
\varphi_7(36) &= \max \left\{ \begin{array}{c} 36.58825434782415 \\ 36.93643714110108 \\ 37.483584415010796 \\ 37.806894624522286 \\ 37.76442392616313 \\ \dots\dots\dots \\ 8.673462611694449 \\ 7.734769709427136 \\ 5.4364721656753705 \\ 2.574594990367292 \\ 2.0 \end{array} \right\} = 37.806894624522286, \quad x_7^0 = 4
\end{aligned}$$

8 Product 8

$$\varphi_8(1) = \max \{ 0.053903575992683805 \} = 0.053903575992683805, \quad x_8^0 = 1$$

$$\varphi_8(2) = \max \left\{ \begin{array}{c} 0.09053485377015225 \\ 1.2594564019896977 \end{array} \right\} = 1.2594564019896977, \quad x_8^0 = 2$$

$$\varphi_8(3) = \max \left\{ \begin{array}{c} 0.6651298441374441 \\ 1.296087679767166 \\ 3.7307422037601095 \end{array} \right\} = 3.7307422037601095, \quad x_8^0 = 3$$

$$\varphi_8(4) = \max \left\{ \begin{array}{c} 3.5270070194455223 \\ 1.870682670134458 \\ 3.767373481537578 \\ 5.92673785697855 \end{array} \right\} = 5.92673785697855, \quad x_8^0 = 4$$

$$\varphi_8(5) = \max \left\{ \begin{array}{c} 5.825304563197288 \\ 4.732559845442536 \\ 4.3419684719048695 \\ 5.963369134756018 \\ 7.192598477801109 \end{array} \right\} = 7.192598477801109, \quad x_8^0 = 5$$

$$\varphi_8(6) = \max \left\{ \begin{array}{c} 6.763997465464601 \\ 7.030857389194302 \\ 7.2038456472129475 \\ 6.53796412512331 \\ 7.229229755578578 \\ 7.738643642745617 \end{array} \right\} = 7.738643642745617, \quad x_8^0 = 6$$

$$\varphi_8(7) = \max \left\{ \begin{array}{c} 7.232076042856115 \\ 7.969550291461615 \\ 9.502143190964713 \\ 9.399841300431389 \\ 7.803824745945869 \\ 7.775274920523086 \\ 7.927754281197564 \end{array} \right\} = 9.502143190964713, \quad x_8^0 = 3$$

$$\varphi_8(8) = \max \left\{ \begin{array}{c} 9.539690346439073 \\ 8.437628868853128 \\ 10.440836093232026 \\ 11.698138844183154 \\ 10.665701921253948 \\ 8.349869910890378 \\ 7.9643855589750325 \\ 7.982591564740994 \end{array} \right\} = 11.698138844183154, \quad x_8^0 = 4$$

$$\begin{aligned}
\varphi_8(9) &= \max \left\{ \begin{array}{l} 11.837987890190838 \\ 10.745243172436087 \\ 10.908914670623542 \\ 12.636831746450467 \\ 12.963999465005713 \\ 11.211747086198455 \\ 8.538980549342325 \\ 8.019222842518463 \\ 7.9962843213485835 \end{array} \right\} = 12.963999465005713, \quad x_8^0 = 5 \\
\varphi_8(10) &= \max \left\{ \begin{array}{l} 13.238592192436599 \\ 13.043540716187852 \\ 13.216528974206497 \\ 13.104910323841981 \\ 13.902692367273026 \\ 13.510044629950222 \\ 11.400857724650402 \\ 8.593817832885755 \\ 8.032915599126053 \\ 7.999288460591455 \end{array} \right\} = 13.902692367273026, \quad x_8^0 = 5 \\
\varphi_8(11) &= \max \left\{ \begin{array}{l} 14.177285094703912 \\ 14.444145018433613 \\ 15.514826517958262 \\ 15.412524627424938 \\ 14.37077094466454 \\ \dots\dots\dots \\ 13.69915526840217 \\ 11.455695008193832 \\ 8.607510589493344 \\ 8.035919738368923 \\ 7.999876473514293 \end{array} \right\} = 15.514826517958262, \quad x_8^0 = 3 \\
\varphi_8(12) &= \max \left\{ \begin{array}{l} 16.423274575368474 \\ 15.382837920700926 \\ 16.915430820204026 \\ 17.7108221711767 \\ 16.678385248247498 \\ \dots\dots\dots \\ 13.753992551945597 \\ 11.469387764801422 \\ 8.610514728736215 \\ 8.036507751291762 \\ 7.9999803906289815 \end{array} \right\} = 17.7108221711767, \quad x_8^0 = 4
\end{aligned}$$

$$\begin{aligned}
\varphi_8(13) &= \max \left\{ \begin{array}{l} 18.72157211912024 \\ 17.628827401365488 \\ 17.85412372247134 \\ 19.111426473422465 \\ 18.976682791999263 \\ \dots\dots\dots \\ 13.767685308553187 \\ 11.472391904044294 \\ 8.611102741659053 \\ 8.03661166840645 \\ 7.999997132808517 \end{array} \right\} = 19.111426473422465, \quad x_8^0 = 4 \\
\varphi_8(14) &= \max \left\{ \begin{array}{l} 20.516543698216644 \\ 19.927124945117253 \\ 20.100113203135898 \\ 20.05011937568978 \\ 20.377287094245027 \\ \dots\dots\dots \\ 13.770689447796059 \\ 11.472979916967132 \\ 8.611206658773742 \\ 8.036628410585985 \\ 7.999999611473502 \end{array} \right\} = 20.516543698216644, \quad x_8^0 = 1 \\
\varphi_8(15) &= \max \left\{ \begin{array}{l} 21.917148000462404 \\ 21.722096524213658 \\ 22.398410746887663 \\ 22.296108856354337 \\ 21.31597999651234 \\ \dots\dots\dots \\ 13.771277460718897 \\ 11.47308383408182 \\ 8.611223400953277 \\ 8.03663088925097 \\ 7.99999950946904 \end{array} \right\} = 22.398410746887663, \quad x_8^0 = 3 \\
\varphi_8(16) &= \max \left\{ \begin{array}{l} 22.855840902729717 \\ 23.12270082645942 \\ 24.193382325984068 \\ 24.594406400106102 \\ 23.5619694771769 \\ \dots\dots\dots \\ 13.771381377833585 \\ 11.473100576261356 \\ 8.611225879618262 \\ 8.036631228724373 \\ 7.999999942029705 \end{array} \right\} = 24.594406400106102, \quad x_8^0 = 4
\end{aligned}$$

$$\begin{aligned}
\varphi_8(17) &= \max \left\{ \begin{array}{l} 23.71002320245021 \\ 24.06139372872673 \\ 25.59398662822983 \\ 26.389377979202507 \\ 25.860267020928664 \\ \dots\dots\dots \\ 13.77139812001312 \\ 11.47310305492634 \\ 8.611226219091664 \\ 8.03663127198044 \\ 7.99999999356121 \end{array} \right\} = 26.389377979202507, \quad x_8^0 = 4 \\
\varphi_8(18) &= \max \left\{ \begin{array}{l} 24.415928728754814 \\ 24.915576028447223 \\ 26.53267953049714 \\ 27.789982281448268 \\ 27.65523860002507 \\ \dots\dots\dots \\ 13.771400598678106 \\ 11.473103394399743 \\ 8.611226262347731 \\ 8.03663127713359 \\ 7.99999999932543 \end{array} \right\} = 27.789982281448268, \quad x_8^0 = 4 \\
\varphi_8(19) &= \max \left\{ \begin{array}{l} 25.727508266879106 \\ 25.621481554751828 \\ 27.386861830217633 \\ 28.72867518371558 \\ 29.05584290227083 \\ \dots\dots\dots \\ 13.771400938151508 \\ 11.473103437655809 \\ 8.611226267500882 \\ 8.036631277710011 \\ 7.99999999993313 \end{array} \right\} = 29.05584290227083, \quad x_8^0 = 5 \\
\varphi_8(20) &= \max \left\{ \begin{array}{l} 26.66620116914642 \\ 26.93306109287612 \\ 28.092767356522238 \\ 29.582857483436072 \\ 29.994535804538142 \\ \dots\dots\dots \\ 13.771400981407574 \\ 11.47310344280896 \\ 8.611226268077303 \\ 8.03663127777078 \\ 7.9999999999371 \end{array} \right\} = 29.994535804538142, \quad x_8^0 = 5
\end{aligned}$$

$$\begin{aligned}
\varphi_8(21) &= \max \left\{ \begin{array}{l} 28.056872509594207 \\ 27.871753995143433 \\ 29.40434689464653 \\ 30.288763009740677 \\ 30.848718104258634 \\ \dots\dots\dots \\ 13.771400986560725 \\ 11.473103443385382 \\ 8.611226268138074 \\ 8.03663127777684 \\ 7.999999999999944 \end{array} \right\} = 30.848718104258634, \quad x_8^0 = 5 \\
\varphi_8(22) &= \max \left\{ \begin{array}{l} 29.01560051071943 \\ 29.26242533559122 \\ 30.343039796913843 \\ 31.60034254786497 \\ 31.55462363056324 \\ \dots\dots\dots \\ 13.771400987137147 \\ 11.473103443446151 \\ 8.611226268144131 \\ 8.036631277777413 \\ 7.999999999999996 \end{array} \right\} = 31.60034254786497, \quad x_8^0 = 4 \\
\varphi_8(23) &= \max \left\{ \begin{array}{l} 29.954293412986743 \\ 30.221153336716444 \\ 31.73371113736163 \\ 32.53903545013228 \\ 32.866203168687534 \\ \dots\dots\dots \\ 13.771400987197918 \\ 11.47310344345221 \\ 8.611226268144705 \\ 8.036631277777463 \\ 8.0 \end{array} \right\} = 32.866203168687534, \quad x_8^0 = 5 \\
\varphi_8(24) &= \max \left\{ \begin{array}{l} 30.82967110189034 \\ 31.159846238983757 \\ 32.692439138486854 \\ 33.92970679058007 \\ 33.80489607095484 \\ \dots\dots\dots \\ 13.771400987203975 \\ 11.473103443452782 \\ 8.611226268144756 \\ 8.036631277777468 \\ 8.0 \end{array} \right\} = 33.92970679058007, \quad x_8^0 = 4
\end{aligned}$$

$$\begin{aligned}
\varphi_8(25) &= \max \left\{ \begin{array}{c} 31.683853401610833 \\ 32.03522392788735 \\ 33.63113204075417 \\ 34.88843479170529 \\ 35.195567411402635 \\ \dots\dots\dots \\ 13.771400987204547 \\ 11.473103443452834 \\ 8.61122626814476 \\ 8.036631277777468 \\ 8.0 \end{array} \right\} = 35.195567411402635, \quad x_8^0 = 5 \\
\varphi_8(26) &= \max \left\{ \begin{array}{c} 32.38975892791544 \\ 32.88940622760784 \\ 34.506509729657765 \\ 35.827127693972606 \\ 36.15429541252786 \\ \dots\dots\dots \\ 13.7714009872046 \\ 11.473103443452839 \\ 8.61122626814476 \\ 8.036631277777468 \\ 8.0 \end{array} \right\} = 36.15429541252786, \quad x_8^0 = 5 \\
\varphi_8(27) &= \max \left\{ \begin{array}{c} 33.24394122763592 \\ 33.59531175391245 \\ 35.36069202937826 \\ 36.702505382876204 \\ 37.092988314795164 \\ \dots\dots\dots \\ 13.771400987204604 \\ 11.473103443452839 \\ 8.61122626814476 \\ 8.036631277777468 \\ 8.0 \end{array} \right\} = 37.092988314795164, \quad x_8^0 = 5 \\
\varphi_8(28) &= \max \left\{ \begin{array}{c} 34.02646040830801 \\ 34.44949405363293 \\ 36.06659755568286 \\ 37.556687682596696 \\ 37.96836600369876 \\ \dots\dots\dots \\ 13.771400987204604 \\ 11.473103443452839 \\ 8.61122626814476 \\ 8.036631277777468 \\ 8.0 \end{array} \right\} = 37.96836600369876, \quad x_8^0 = 5
\end{aligned}$$

$$\begin{aligned}
\varphi_8(29) &= \max \left\{ \begin{array}{c} 34.49691773256165 \\ 35.23201323430502 \\ 36.920779855403346 \\ 38.2625932089013 \\ 38.822548303419254 \\ \dots\dots\dots \\ 13.771400987204604 \\ 11.473103443452839 \\ 8.61122626814476 \\ 8.036631277777468 \\ 8.0 \end{array} \right\} = 38.822548303419254, \quad x_8^0 = 5 \\
\varphi_8(30) &= \max \left\{ \begin{array}{c} 35.19114252966556 \\ 35.70247055855866 \\ 37.703299036075435 \\ 39.116775508621785 \\ 39.52845382972386 \\ \dots\dots\dots \\ 13.771400987204604 \\ 11.473103443452839 \\ 8.61122626814476 \\ 8.036631277777468 \\ 8.0 \end{array} \right\} = 39.52845382972386, \quad x_8^0 = 5 \\
\varphi_8(31) &= \max \left\{ \begin{array}{c} 35.670506530228174 \\ 36.39669535566257 \\ 38.17375636032907 \\ 39.899294689293875 \\ 40.38263612944435 \\ \dots\dots\dots \\ 13.771400987204604 \\ 11.473103443452839 \\ 8.61122626814476 \\ 8.036631277777468 \\ 8.0 \end{array} \right\} = 40.38263612944435, \quad x_8^0 = 5 \\
\varphi_8(32) &= \max \left\{ \begin{array}{c} 36.14096385448181 \\ 36.876059356225184 \\ 38.867981157432986 \\ 40.36975201354751 \\ 41.16515531011643 \\ \dots\dots\dots \\ 13.771400987204604 \\ 11.473103443452839 \\ 8.61122626814476 \\ 8.036631277777468 \\ 8.0 \end{array} \right\} = 41.16515531011643, \quad x_8^0 = 5
\end{aligned}$$

$$\begin{aligned}
\varphi_8(33) &= \max \left\{ \begin{array}{c} 36.577064225208886 \\ 37.34651668047882 \\ 39.3473451579956 \\ 41.063976810651425 \\ 41.63561263437008 \\ \dots\dots\dots \\ 13.771400987204604 \\ 11.473103443452839 \\ 8.61122626814476 \\ 8.036631277777468 \\ 8.0 \end{array} \right\} = 41.71120047506094, \quad x_8^0 = 6 \\
\varphi_8(34) &= \max \left\{ \begin{array}{c} 36.9803450134562 \\ 37.7826170512059 \\ 39.817802482249235 \\ 41.54334081121404 \\ 42.32983743147399 \\ \dots\dots\dots \\ 13.771400987204604 \\ 11.473103443452839 \\ 8.61122626814476 \\ 8.036631277777468 \\ 8.0 \end{array} \right\} = 42.32983743147399, \quad x_8^0 = 5 \\
\varphi_8(35) &= \max \left\{ \begin{array}{c} 37.306241489133754 \\ 38.18589783945321 \\ 40.25390285297631 \\ 42.013798135467674 \\ 42.8092014320366 \\ \dots\dots\dots \\ 13.771400987204604 \\ 11.473103443452839 \\ 8.61122626814476 \\ 8.036631277777468 \\ 8.0 \end{array} \right\} = 42.87588259641849, \quad x_8^0 = 6 \\
\varphi_8(36) &= \max \left\{ \begin{array}{c} 37.60027731679228 \\ 38.511794315130764 \\ 40.657183641223625 \\ 42.44989850619475 \\ 43.27965875629023 \\ \dots\dots\dots \\ 13.771400987204604 \\ 11.473103443452839 \\ 8.61122626814476 \\ 8.036631277777468 \\ 8.0 \end{array} \right\} = 43.355246596981104, \quad x_8^0 = 6
\end{aligned}$$

9 Product 9

$$\begin{aligned}
\varphi_9(1) &= \max \{ 0.0333269896147268 \} = 0.0333269896147268, \quad x_9^0 = 1 \\
\varphi_9(2) &= \max \left\{ \begin{array}{c} 0.0872305656074106 \\ 0.5990683577564593 \end{array} \right\} = 0.5990683577564593, \quad x_9^0 = 2 \\
\varphi_9(3) &= \max \left\{ \begin{array}{c} 1.2927833916044245 \\ 0.6529719337491431 \\ 1.5934148156398198 \end{array} \right\} = 1.5934148156398198, \quad x_9^0 = 3 \\
\varphi_9(4) &= \max \left\{ \begin{array}{c} 3.7640691933748363 \\ 1.858524759746157 \\ 1.6473183916325036 \\ 2.3759339963119044 \end{array} \right\} = 3.7640691933748363, \quad x_9^0 = 1 \\
\varphi_9(5) &= \max \left\{ \begin{array}{c} 5.960064846593276 \\ 4.3298105615165685 \\ 2.8528712176295175 \\ 2.429837572304588 \\ 2.7792147845592217 \end{array} \right\} = 5.960064846593276, \quad x_9^0 = 1 \\
\varphi_9(6) &= \max \left\{ \begin{array}{c} 7.225925467415836 \\ 6.525806214735009 \\ 5.324157019399929 \\ 3.635390398301602 \\ 2.8331183605519055 \\ 2.9352685756103423 \end{array} \right\} = 7.225925467415836, \quad x_9^0 = 1 \\
\varphi_9(7) &= \max \left\{ \begin{array}{c} 7.771970632360344 \\ 7.791666835557568 \\ 7.520152672618369 \\ 6.106676200072014 \\ 4.038671186548919 \\ 2.989172151603026 \\ 2.9838218493295816 \end{array} \right\} = 7.791666835557568, \quad x_9^0 = 2 \\
\varphi_9(8) &= \max \left\{ \begin{array}{c} 9.53547018057944 \\ 8.337712000502076 \\ 8.786013293440929 \\ 8.302671853290454 \\ 6.509956988319331 \\ 4.19472497760004 \\ 3.0377254253222654 \\ 2.996479347099797 \end{array} \right\} = 9.53547018057944, \quad x_9^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_9(9) &= \max \left\{ \begin{array}{c} 11.73146583379788 \\ 10.101211548721173 \\ 9.332058458385436 \\ 9.568532474113013 \\ 8.70595264153777 \\ 6.666010779370452 \\ 4.243278251319279 \\ 3.0503829230924806 \\ 2.999321860051384 \end{array} \right\} = 11.73146583379788, \quad x_9^0 = 1 \\
\varphi_9(10) &= \max \left\{ \begin{array}{c} 12.99732645462044 \\ 12.297207201939614 \\ 11.095558006604533 \\ 10.114577639057522 \\ 9.971813262360332 \\ 8.862006432588892 \\ 6.714564053089691 \\ 4.2559357490894945 \\ 3.053225436044068 \\ 2.999882870640876 \end{array} \right\} = 12.99732645462044, \quad x_9^0 = 1 \\
\varphi_9(11) &= \max \left\{ \begin{array}{c} 13.936019356887753 \\ 13.563067822762173 \\ 13.291553659822974 \\ 11.878077187276617 \\ 10.517858427304839 \\ \dots\dots\dots \\ 8.910559706308131 \\ 6.727221550859906 \\ 4.258778262041082 \\ 3.05378644663356 \\ 2.999981666608582 \end{array} \right\} = 13.936019356887753, \quad x_9^0 = 1 \\
\varphi_9(12) &= \max \left\{ \begin{array}{c} 15.548153507572989 \\ 14.501760725029486 \\ 14.557414280645533 \\ 14.074072840495058 \\ 12.281357975523935 \\ \dots\dots\dots \\ 8.923217204078346 \\ 6.7300640638114935 \\ 4.259339272630574 \\ 3.053885242601266 \\ 2.999997376781244 \end{array} \right\} = 15.548153507572989, \quad x_9^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_9(13) &= \max \left\{ \begin{array}{l} 17.74414916079143 \\ 16.11389487571472 \\ 15.496107182912846 \\ 15.339933461317617 \\ 14.477353628742375 \\ \dots\dots\dots \\ 8.926059717029933 \\ 6.730625074400986 \\ 4.25943806859828 \\ 3.053900952773928 \\ 2.9999996543655207 \end{array} \right\} = 17.74414916079143, \quad x_9^0 = 1 \\
\varphi_9(14) &= \max \left\{ \begin{array}{l} 19.14475346303719 \\ 18.30989052893316 \\ 17.10824133359808 \\ 16.27862636358493 \\ 15.743214249564936 \\ \dots\dots\dots \\ 8.926620727619426 \\ 6.730723870368692 \\ 4.259453778770942 \\ 3.0539032303582045 \\ 2.9999999578019034 \end{array} \right\} = 19.14475346303719, \quad x_9^0 = 1 \\
\varphi_9(15) &= \max \left\{ \begin{array}{l} 20.549870687831373 \\ 19.710494831178924 \\ 19.30423698681652 \\ 17.890760514270166 \\ 16.68190715183225 \\ \dots\dots\dots \\ 8.926719523587131 \\ 6.7307395805413535 \\ 4.259456056355218 \\ 3.0539035337945872 \\ 2.999999952005854 \end{array} \right\} = 20.549870687831373, \quad x_9^0 = 1 \\
\varphi_9(16) &= \max \left\{ \begin{array}{l} 22.43173773650239 \\ 21.115612055973102 \\ 20.704841289062287 \\ 20.086756167488605 \\ 18.294041302517485 \\ \dots\dots\dots \\ 8.926735233759793 \\ 6.73074185812563 \\ 4.259456359791601 \\ 3.053903571193269 \\ 2.999999994891113 \end{array} \right\} = 22.43173773650239, \quad x_9^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_9(17) &= \max \left\{ \begin{array}{l} 24.62773338972083 \\ 22.99747910464412 \\ 22.109958513856462 \\ 21.48736046973437 \\ 20.490036955735924 \\ \dots\dots\dots \\ 8.92673751134407 \\ 6.730742161562013 \\ 4.259456397190283 \\ 3.053903575481795 \\ 2.99999999948893 \end{array} \right\} = 24.62773338972083, \quad x_9^0 = 1 \\
\varphi_9(18) &= \max \left\{ \begin{array}{l} 26.422704968817236 \\ 25.19347475786256 \\ 23.99182556252748 \\ 22.892477694528548 \\ 21.890641257981688 \\ \dots\dots\dots \\ 8.926737814780452 \\ 6.730742198960694 \\ 4.259456401478809 \\ 3.0539035759415767 \\ 2.99999999995178 \end{array} \right\} = 26.422704968817236, \quad x_9^0 = 1 \\
\varphi_9(19) &= \max \left\{ \begin{array}{l} 27.823309271062996 \\ 26.988446336958965 \\ 26.18782121574592 \\ 24.774344743199567 \\ 23.295758482775867 \\ \dots\dots\dots \\ 8.926737852179135 \\ 6.730742203249221 \\ 4.259456401938591 \\ 3.053903575987862 \\ 2.99999999995697 \end{array} \right\} = 27.823309271062996, \quad x_9^0 = 1 \\
\varphi_9(20) &= \max \left\{ \begin{array}{l} 29.089169891885554 \\ 28.389050639204726 \\ 27.982792794842325 \\ 26.970340396418006 \\ 25.177625531446886 \\ \dots\dots\dots \\ 8.92673785646766 \\ 6.730742203709003 \\ 4.259456401984876 \\ 3.0539035759922535 \\ 2.99999999999636 \end{array} \right\} = 29.089169891885554, \quad x_9^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_9(21) &= \max \left\{ \begin{array}{c} 30.027862794152867 \\ 29.654911260027287 \\ 29.383397097088086 \\ 28.76531197551441 \\ 27.373621184665325 \\ \dots\dots\dots \\ 8.926737856927442 \\ 6.7307422037552875 \\ 4.259456401989267 \\ 3.0539035759926474 \\ 2.999999999999997 \end{array} \right\} = 30.027862794152867, \quad x_9^0 = 1 \\
\varphi_9(22) &= \max \left\{ \begin{array}{c} 30.88204509387336 \\ 30.5936041622946 \\ 30.64925771791065 \\ 30.16591627776017 \\ 29.16859276376173 \\ \dots\dots\dots \\ 8.926737856973727 \\ 6.730742203759679 \\ 4.259456401989661 \\ 3.0539035759926807 \\ 2.999999999999996 \end{array} \right\} = 30.88204509387336, \quad x_9^0 = 1 \\
\varphi_9(23) &= \max \left\{ \begin{array}{c} 31.633669537479697 \\ 31.44778646201509 \\ 31.587950620177963 \\ 31.431776898582733 \\ 30.56919706600749 \\ \dots\dots\dots \\ 8.92673785697812 \\ 6.730742203760073 \\ 4.259456401989695 \\ 3.0539035759926834 \\ 3.0 \end{array} \right\} = 31.633669537479697, \quad x_9^0 = 1 \\
\varphi_9(24) &= \max \left\{ \begin{array}{c} 32.89953015830226 \\ 32.19941090562143 \\ 32.442132919898455 \\ 32.370469800850046 \\ 31.83505768683005 \\ \dots\dots\dots \\ 8.926737856978512 \\ 6.730742203760107 \\ 4.259456401989697 \\ 3.053903575992684 \\ 3.0 \end{array} \right\} = 32.89953015830226, \quad x_9^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_9(25) &= \max \left\{ \begin{array}{c} 33.9630337801948 \\ 33.46527152644399 \\ 33.19375736350479 \\ 33.22465210057054 \\ 32.77375058909736 \\ \dots\dots\dots \\ 8.926737856978546 \\ 6.730742203760109 \\ 4.259456401989698 \\ 3.053903575992684 \\ 3.0 \end{array} \right\} = 33.9630337801948, \quad x_9^0 = 1 \\
\varphi_9(26) &= \max \left\{ \begin{array}{c} 35.228894401017364 \\ 34.52877514833653 \\ 34.45961798432735 \\ 33.976276544176876 \\ 33.62793288881785 \\ \dots\dots\dots \\ 8.92673785697855 \\ 6.7307422037601095 \\ 4.259456401989698 \\ 3.053903575992684 \\ 3.0 \end{array} \right\} = 35.228894401017364, \quad x_9^0 = 1 \\
\varphi_9(27) &= \max \left\{ \begin{array}{c} 36.18762240214259 \\ 35.79463576915909 \\ 35.52312160621989 \\ 35.24213716499944 \\ 34.37955733242419 \\ \dots\dots\dots \\ 8.92673785697855 \\ 6.7307422037601095 \\ 4.259456401989698 \\ 3.053903575992684 \\ 3.0 \end{array} \right\} = 36.18762240214259, \quad x_9^0 = 1 \\
\varphi_9(28) &= \max \left\{ \begin{array}{c} 37.12631530440989 \\ 36.75336377028432 \\ 36.78898222704245 \\ 36.30564078689198 \\ 35.645417953246756 \\ \dots\dots\dots \\ 8.92673785697855 \\ 6.7307422037601095 \\ 4.259456401989698 \\ 3.053903575992684 \\ 3.0 \end{array} \right\} = 37.12631530440989, \quad x_9^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_9(29) &= \max \left\{ \begin{array}{c} 38.00169299331349 \\ 37.69205667255162 \\ 37.747710228167676 \\ 37.57150140771454 \\ 36.70892157513929 \\ \dots\dots\dots \\ 8.92673785697855 \\ 6.7307422037601095 \\ 4.259456401989698 \\ 3.053903575992684 \\ 3.0 \end{array} \right\} = 38.00169299331349, \quad x_9^0 = 1 \\
\varphi_9(30) &= \max \left\{ \begin{array}{c} 38.85587529303398 \\ 38.56743436145522 \\ 38.68640313043498 \\ 38.530229408839766 \\ 37.97478219596186 \\ \dots\dots\dots \\ 8.92673785697855 \\ 6.7307422037601095 \\ 4.259456401989698 \\ 3.053903575992684 \\ 3.0 \end{array} \right\} = 38.85587529303398, \quad x_9^0 = 1 \\
\varphi_9(31) &= \max \left\{ \begin{array}{c} 39.56178081933859 \\ 39.42161666117571 \\ 39.56178081933858 \\ 39.46892231110707 \\ 38.93351019708708 \\ \dots\dots\dots \\ 8.92673785697855 \\ 6.7307422037601095 \\ 4.259456401989698 \\ 3.053903575992684 \\ 3.0 \end{array} \right\} = 39.56178081933859, \quad x_9^0 = 1 \\
\varphi_9(32) &= \max \left\{ \begin{array}{c} 40.41596311905908 \\ 40.12752218748032 \\ 40.41596311905907 \\ 40.34430000001067 \\ 39.87220309935439 \\ \dots\dots\dots \\ 8.92673785697855 \\ 6.7307422037601095 \\ 4.259456401989698 \\ 3.053903575992684 \\ 3.0 \end{array} \right\} = 40.41596311905908, \quad x_9^0 = 1
\end{aligned}$$

$$\begin{aligned}
\varphi_9(33) &= \max \left\{ \begin{array}{c} 41.19848229973116 \\ 40.98170448720081 \\ 41.121868645363676 \\ 41.19848229973116 \\ 40.747580788257984 \\ \dots\dots\dots \\ 8.92673785697855 \\ 6.7307422037601095 \\ 4.259456401989698 \\ 3.053903575992684 \\ 3.0 \end{array} \right\} = 41.19848229973116, \quad x_9^0 = 1 \\
\varphi_9(34) &= \max \left\{ \begin{array}{c} 41.74452746467567 \\ 41.76422366787289 \\ 41.97605094508417 \\ 41.904387826035766 \\ 41.601763087978476 \\ \dots\dots\dots \\ 8.92673785697855 \\ 6.7307422037601095 \\ 4.259456401989698 \\ 3.053903575992684 \\ 3.0 \end{array} \right\} = 41.97605094508417, \quad x_9^0 = 3 \\
\varphi_9(35) &= \max \left\{ \begin{array}{c} 42.36316442108872 \\ 42.3102688328174 \\ 42.75857012575625 \\ 42.75857012575626 \\ 42.30766861428308 \\ \dots\dots\dots \\ 8.92673785697855 \\ 6.7307422037601095 \\ 4.259456401989698 \\ 3.053903575992684 \\ 3.0 \end{array} \right\} = 42.75857012575626, \quad x_9^0 = 4 \\
\varphi_9(36) &= \max \left\{ \begin{array}{c} 42.90920958603322 \\ 42.92890578923045 \\ 43.30461529070076 \\ 43.54108930642834 \\ 43.16185091400357 \\ \dots\dots\dots \\ 8.92673785697855 \\ 6.7307422037601095 \\ 4.259456401989698 \\ 3.053903575992684 \\ 3.0 \end{array} \right\} = 43.54108930642834, \quad x_9^0 = 4
\end{aligned}$$

