다항식의 나눗셈 예제
(Polynomial Division Example)

Polynomial Division Example

▸ Start ▸ End

Polynomial Division Example

Start End

$$3769$$

Polynomial Division Example

Start End

$$\overline{)3769}$$

Start End

$$15\overline{)3769}$$

Polynomial Division Example

Start End

$$\begin{array}{r} 2 \\ 15\overline{)\,3769} \end{array}$$

Polynomial Division Example

Start End

$$\begin{array}{r} 2 \\ 15\overline{)\,3769} \\ 30 \end{array}$$

Polynomial Division Example

Start End

$$
\begin{array}{r}
2 \\
15\overline{)\,3769} \\
30 \\
\hline
\end{array}
$$

Start End

$$
\begin{array}{r}
2 \\
15\overline{)\,3769} \\
30 \\
\hline
7
\end{array}
$$

Polynomial Division Example

Start End

$$
\begin{array}{r}
2 \\
15\overline{)\,3769} \\
30 \\
\hline
76
\end{array}
$$

Polynomial Division Example

Start End

$$
\begin{array}{r}
25 \\
15\overline{)\,3769} \\
30 \\
\hline
76
\end{array}
$$

Polynomial Division Example

Start End

$$
\begin{array}{r}
25 \\
15\overline{)\,3769} \\
30 \\
\hline
76 \\
75
\end{array}
$$

Polynomial Division Example

Start End

$$
\begin{array}{r}
25 \\
15\overline{)\,3769} \\
30 \\
\hline
76 \\
75 \\
\hline
\end{array}
$$

Polynomial Division Example

Start End

$$
\begin{array}{r}
25 \\
15\overline{)\,3769} \\
30 \\
\hline
76 \\
75 \\
\hline
1
\end{array}
$$

Polynomial Division Example

Start End

$$
\begin{array}{r}
25 \\
15\overline{)\,3769} \\
30 \\
\hline
76 \\
75 \\
\hline
19
\end{array}
$$

Polynomial Division Example

Start End

$$
\begin{array}{r}
251 \\
15\overline{)\,3769} \\
30 \\
\hline
76 \\
75 \\
\hline
19
\end{array}
$$

Polynomial Division Example

Start End

$$
\begin{array}{r}
251 \\
15\overline{)\,3769} \\
30 \\
\hline
76 \\
75 \\
\hline
19 \\
15
\end{array}
$$

Polynomial Division Example

Start End

$$
\begin{array}{r}
251 \\
15\overline{)\,3769} \\
30 \\
\hline
76 \\
75 \\
\hline
19 \\
15 \\
\hline
\end{array}
$$

Polynomial Division Example

Start End

$$
\begin{array}{r}
251 \\
15\overline{)\,3769} \\
30 \\
\hline
76 \\
75 \\
\hline
19 \\
15 \\
\hline
4
\end{array}
$$

Polynomial Division Example

Start End

$$
\begin{array}{r}
251 \\
15\overline{)\,3769} \\
30 \\
\hline
76 \\
75 \\
\hline
19 \\
15 \\
\hline
4
\end{array}
$$

$$3769 = 15 \times 251 + 4$$

Polynomial Division Example

Start End

$$2x^3 - 3x^2 + 0 \cdot x + 7$$

$$\begin{array}{r} 251 \\ 15\overline{)\,3769} \\ 30 \\ \hline 76 \\ 75 \\ \hline 19 \\ 15 \\ \hline 4 \end{array}$$

$$3769 = 15 \times 251 + 4$$

Start End

$$\overline{|2x^3 - 3x^2 + 0 \cdot x + 7}$$

$$\begin{array}{r} 251 \\ 15\overline{|3769} \\ 30 \\ \hline 76 \\ 75 \\ \hline 19 \\ 15 \\ \hline 4 \end{array}$$

$$3769 = 15 \times 251 + 4$$

$$2x+1\overline{)2x^3-3x^2+0\cdot x+7}$$

$$\begin{array}{r} 251 \\ 15\overline{)3769} \\ 30 \\ \hline 76 \\ 75 \\ \hline 19 \\ 15 \\ \hline 4 \end{array}$$

$$3769 = 15 \times 251 + 4$$

Start End

$$
\begin{array}{r}
x^2 \\
2x+1 \overline{\big)\, 2x^3 - 3x^2 + 0 \cdot x + 7}
\end{array}
$$

$$
\begin{array}{r}
251 \\
15 \overline{\big)\, 3769} \\
30 \\
\hline
76 \\
75 \\
\hline
19 \\
15 \\
\hline
4
\end{array}
$$

$$3769 = 15 \times 251 + 4$$

Start End

$$
\begin{array}{r}
x^2 \\
2x+1 \overline{)\,2x^3-3x^2+0\cdot x+7} \\
\underline{2x^3+\ \ x^2} \\
\end{array}
$$

$$
\begin{array}{r}
251 \\
15 \overline{)\,3769} \\
\underline{30} \\
76 \\
\underline{75} \\
19 \\
\underline{15} \\
4
\end{array}
$$

$$3769 = 15 \times 251 + 4$$

Start End

$$
\begin{array}{r}
x^2 \\
2x+1 \,\big)\overline{\,2x^3 - 3x^2 + 0 \cdot x + 7} \\
\underline{2x^3 + x^2 }
\end{array}
$$

$$
\begin{array}{r}
251 \\
15 \,\big)\overline{\,3769} \\
\underline{30} \\
76 \\
\underline{75} \\
19 \\
\underline{15} \\
4
\end{array}
$$

$$3769 = 15 \times 251 + 4$$

Polynomial Division Example

Start End

$$
\begin{array}{r|l}
 & x^2 \\
\hline
2x+1 & 2x^3 - 3x^2 + 0\cdot x + 7 \\
 & 2x^3 + x^2 \\
\hline
 & -4x^2
\end{array}
$$

$$
\begin{array}{r|r}
 & 251 \\
\hline
15 & 3769 \\
 & 30 \\
\hline
 & 76 \\
 & 75 \\
\hline
 & 19 \\
 & 15 \\
\hline
 & 4
\end{array}
$$

$$3769 = 15 \times 251 + 4$$

Start End

$$
\begin{array}{r}
x^2 \\
2x+1 \overline{)\,2x^3-3x^2+0\cdot x+7} \\
\underline{2x^3+\ x^2} \\
-4x^2+0\cdot x
\end{array}
$$

$$
\begin{array}{r}
251 \\
15 \overline{)\,3769} \\
\underline{30} \\
76 \\
\underline{75} \\
19 \\
\underline{15} \\
4
\end{array}
$$

$$3769 = 15 \times 251 + 4$$

Start End

$$
\begin{array}{r}
x^2 \quad -2x \\
2x+1 \overline{)\,2x^3-3x^2+0\cdot x+7} \\
\underline{2x^3+\ x^2} \\
-4x^2+0\cdot x
\end{array}
$$

$$
\begin{array}{r}
251 \\
15 \overline{)\,3769} \\
\underline{30} \\
76 \\
\underline{75} \\
19 \\
\underline{15} \\
4
\end{array}
$$

$$3769 = 15 \times 251 + 4$$

Start End

$$
\begin{array}{r}
x^2 \quad -2x \\
2x+1 \overline{\big|\, 2x^3 - 3x^2 + 0\cdot x + 7} \\
\underline{2x^3 + \ x^2} \\
-4x^2 + 0\cdot x \\
\underline{-4x^2 - \ \ 2x} \\
\end{array}
$$

$$
\begin{array}{r}
251 \\
15 \overline{\big|\, 3769} \\
\underline{30} \\
76 \\
\underline{75} \\
19 \\
\underline{15} \\
4
\end{array}
$$

$$3769 = 15 \times 251 + 4$$

Start End

$$
\begin{array}{r|l}
 & x^2 \quad -2x \\
\hline
2x+1 & 2x^3 - 3x^2 + 0 \cdot x + 7 \\
 & \underline{2x^3 + \ x^2} \\
 & \quad -4x^2 + 0 \cdot x \\
 & \quad \underline{-4x^2 - \ \ 2x} \\
 & \qquad\qquad
\end{array}
$$

$$
\begin{array}{r|l}
 & 251 \\
\hline
15 & 3769 \\
 & \underline{30} \\
 & \ 76 \\
 & \underline{75} \\
 & \ \ 19 \\
 & \ \ \underline{15} \\
 & \ \ \ 4
\end{array}
$$

$$3769 = 15 \times 251 + 4$$

Start End

$$
\begin{array}{r}
x^2 \quad -2x \\
2x+1 \overline{)\,2x^3-3x^2+0\cdot x+7} \\
\underline{2x^3+\ x^2} \\
-4x^2+0\cdot x \\
\underline{-4x^2-\ 2x} \\
2x
\end{array}
$$

$$
\begin{array}{r}
251 \\
15 \overline{)\,3769} \\
\underline{30} \\
76 \\
\underline{75} \\
19 \\
\underline{15} \\
4
\end{array}
$$

$$3769 = 15 \times 251 + 4$$

Start End

$$
\begin{array}{r}
x^2 \quad -2x \\
2x+1 \overline{)\,2x^3-3x^2+0\cdot x+7} \\
\underline{2x^3+\ x^2} \\
-4x^2+0\cdot x \\
\underline{-4x^2-\ 2x} \\
2x+7
\end{array}
$$

$$
\begin{array}{r}
251 \\
15 \overline{)\,3769} \\
\underline{30} \\
76 \\
\underline{75} \\
19 \\
\underline{15} \\
4
\end{array}
$$

$$3769 = 15 \times 251 + 4$$

Start End

$$
\begin{array}{r}
x^2 \quad -2x \quad +1 \\
2x+1 \overline{\big|\, 2x^3 - 3x^2 + 0\cdot x + 7} \\
\underline{2x^3 + \ x^2} \\
-4x^2 + 0\cdot x \\
\underline{-4x^2 - \ 2x} \\
2x + 7
\end{array}
$$

$$
\begin{array}{r}
251 \\
15 \overline{\big|\, 3769} \\
\underline{30} \\
76 \\
\underline{75} \\
19 \\
\underline{15} \\
4
\end{array}
$$

$$3769 = 15 \times 251 + 4$$

Start End

$$
\begin{array}{r|l}
 & x^2 \quad -2x \quad +1 \\
\hline
2x+1 & 2x^3 - 3x^2 + 0\cdot x + 7 \\
 & 2x^3 + \quad x^2 \\
\hline
 & -4x^2 + 0\cdot x \\
 & -4x^2 - \quad 2x \\
\hline
 & 2x + 7 \\
 & 2x + 1
\end{array}
$$

$$
\begin{array}{r|r}
 & 251 \\
\hline
15 & 3769 \\
 & 30 \\
\hline
 & 76 \\
 & 75 \\
\hline
 & 19 \\
 & 15 \\
\hline
 & 4
\end{array}
$$

$$3769 = 15 \times 251 + 4$$

Start End

$$
\begin{array}{r}
x^2 \quad -2x \quad +1 \\
2x+1 \overline{)\,2x^3 - 3x^2 + 0\cdot x + 7} \\
\underline{2x^3 + \;\; x^2} \\
-4x^2 + 0\cdot x \\
\underline{-4x^2 - \;\; 2x} \\
2x + 7 \\
\underline{2x + 1} \\
\end{array}
\qquad
\begin{array}{r}
251 \\
15 \overline{)\,3769} \\
\underline{30} \\
76 \\
\underline{75} \\
19 \\
\underline{15} \\
4
\end{array}
$$

$$3769 = 15 \times 251 + 4$$

Start End

$$
\begin{array}{r|l}
 & x^2 \quad -2x \quad +1 \\
\hline
2x+1 & 2x^3 - 3x^2 + 0 \cdot x + 7 \\
 & \underline{2x^3 + \ x^2} \\
 & \quad -4x^2 + 0 \cdot x \\
 & \quad \underline{-4x^2 - \ 2x} \\
 & \qquad\qquad 2x + 7 \\
 & \qquad\qquad \underline{2x + 1} \\
 & \qquad\qquad\quad 6
\end{array}
\qquad
\begin{array}{r|l}
 & 251 \\
\hline
15 & 3769 \\
 & \underline{30} \\
 & \quad 76 \\
 & \quad \underline{75} \\
 & \qquad 19 \\
 & \qquad \underline{15} \\
 & \qquad\quad 4
\end{array}
$$

$$3769 = 15 \times 251 + 4$$

Start End

$$
\begin{array}{r|l}
 & x^2 \quad -2x \quad +1 \\
\hline
2x+1 & 2x^3 - 3x^2 + 0\cdot x + 7 \\
 & \underline{2x^3 + \ x^2} \\
 & \quad -4x^2 + 0\cdot x \\
 & \quad \underline{-4x^2 - \ 2x} \\
 & \qquad\qquad 2x + 7 \\
 & \qquad\qquad \underline{2x + 1} \\
 & \qquad\qquad\quad 6
\end{array}
\qquad
\begin{array}{r|l}
 & 251 \\
\hline
15 & 3769 \\
 & \underline{30} \\
 & \ 76 \\
 & \underline{75} \\
 & \ 19 \\
 & \underline{15} \\
 & \ 4
\end{array}
$$

$$2x^3 - 3x^2 + 7$$
$$= (2x+1)(x^2 - 2x + 1) + 6$$

$$3769 = 15 \times 251 + 4$$

Github:
https://min7014.github.io/math20210306002.html

Click or paste URL into the URL search bar, and you can see a picture moving.