Step	Algorithm: $C := AB + C$
la	$\{C=\widehat{C}$
4	$B \to \begin{pmatrix} B_L & B_R \end{pmatrix}$, $C \to \begin{pmatrix} C_L & C_R \end{pmatrix}$ where B_L has 0 columns, C_L has 0 columns
2	$\left\{ \left(\begin{array}{c c} C_L & C_R \end{array} \right) = \left(\begin{array}{c c} AB_L + \widehat{C}_L & \widehat{C}_R \end{array} \right) $
3	while $n(B_L) < n(B)$ do
2,3	$\left\{ \left. \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \wedge n(B_L) < n(B) \right. \right\}$
5a	Determine block size b $\begin{pmatrix} B_L \mid B_R \end{pmatrix} \rightarrow \begin{pmatrix} B_0 \mid B_1 \mid B_2 \end{pmatrix}, \begin{pmatrix} C_L \mid C_R \end{pmatrix} \rightarrow \begin{pmatrix} C_0 \mid C_1 \mid C_2 \end{pmatrix}$ where B_1 has b columns, C_1 has b columns
6	$\left\{ \left(\begin{array}{cc} C_0 & C_1 & C_2 \end{array} \right) = \left(\begin{array}{cc} AB_0 + \widehat{C}_0 & \widehat{C}_1 & \widehat{C}_2 \end{array} \right) \right.$
8	$C_1 := AB_1 + C_1$
7	$\left\{ \left(\begin{array}{cc} C_0 & C_1 & C_2 \end{array} \right) = \left(\begin{array}{cc} AB_0 + \widehat{C}_0 & AB_1 + \widehat{C}_1 & \widehat{C}_2 \end{array} \right) $
5b	$B \to \left(B_L \middle B_R \right) \leftarrow \left(B_0 \middle B_1 \middle B_2 \right), C \to \left(C_L \middle C_R \right) \leftarrow \left(C_0 \middle C_1 \middle C_2 \right)$
2	$\left\{ \left. \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \right. \right\}$
	endwhile
2,3	$\left\{ \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \land \neg (n(B_L) < n(B)) \right\}$
1b	$\{C = AB + \widehat{C} $

Step	Algorithm: $C := AB + C$
1a	{
4	where
2	
3	while do
2,3	$ \left\{ \begin{array}{ccc} \wedge & & \\ \end{array} \right.$
5a	Determine block size b where
6	\{ \}
8	
7	
5b	
2	
	endwhile
2,3	$\left\{ \begin{array}{ccc} & & & & \\ & & & \\ & & & \\ \end{array} \right.$
1b	{

Step	Algorithm: $C := AB + C$
1a	$\{C = \widehat{C}$
4	where
2	
3	while do
2,3	$\left \left\{ \right. \right. $
5a	Determine block size b where
6	\{ \}
8	
7	
5b	
2	
	endwhile
2,3	$\left \left\{ \begin{array}{cc} \wedge \neg (&) \\ \end{array} \right. \right.$
1b	$\{C = AB + \hat{C}\}$

Step	Algorithm: $C := AB + C$
1a	$\{C = \widehat{C}$
4	
	where
2	$\left\{ \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \right\}$
3	while do
2,3	$\left\{ \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \land \right.$
	Determine block size b
5a	
	where
6	$ \left\{ \right. $
8	
7	$\left\{ \left\{ \right. \right. \right\}$
5b	
2	$\left\{ \left(\left. C_L \right C_R \right) = \left(\left. AB_L + \widehat{C}_L \right \widehat{C}_R \right) \right. $
	endwhile
2,3	$\left\{ \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \land \neg () \right\}$
1b	$\{C = AB + \widehat{C} $

Step	Algorithm: $C := AB + C$
1a	$\{C = \widehat{C}\}$
4	where
2	$\left\{ \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \right\}$
3	while $n(B_L) < n(B)$ do
2,3	$\left\{ \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \wedge n(B_L) < n(B) \right\}$
5a	
	where
6	$ $ $\{$
8	
7	
5b	
2	$\left\{ \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \right. $
	endwhile
2,3	$\left\{ \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \land \neg (n(B_L) < n(B)) \right\}$
1b	$\left\{ C = AB + \widehat{C} \right\}$

Step	Algorithm: $C := AB + C$
1a	$\{C = \widehat{C}\}$
4	$B \to \begin{pmatrix} B_L \mid B_R \end{pmatrix}$, $C \to \begin{pmatrix} C_L \mid C_R \end{pmatrix}$ where B_L has 0 columns, C_L has 0 columns
2	$\left\{ \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \right\}$
3	while $n(B_L) < n(B)$ do
2,3	$\left\{ \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \wedge n(B_L) < n(B) \right\}$
	Determine block size b
5a	
	where
6	\
8	
7	
5b	
2	$\left\{ \left. \left(\left. C_L \right C_R \right) = \left(\left. AB_L + \widehat{C}_L \right \widehat{C}_R \right) \right. \right\}$
	endwhile
2,3	$\left\{ \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \land \neg (n(B_L) < n(B)) \right\}$
1b	$\left\{ C = AB + \widehat{C} \right\}$

```
Algorithm: C := AB + C
Step
                   \{C=\widehat{C}
   1a
                   B \to \left( B_L \middle| B_R \right), C \to \left( C_L \middle| C_R \right)
    4
                     where B_L has 0 columns, C_L has 0 columns
\left\{ \left( \begin{array}{c|c} C_L & C_R \end{array} \right) = \left( \begin{array}{c|c} AB_L + \widehat{C}_L & \widehat{C}_R \end{array} \right)
    2
                   while n(B_L) < n(B) do
    3
                                  \left(\begin{array}{c|c} C_L & C_R \end{array}\right) = \left(\begin{array}{c|c} AB_L + \widehat{C}_L & \widehat{C}_R \end{array}\right) \wedge n(B_L) < n(B)
  2,3
                              Determine block size b
\begin{pmatrix} B_L \mid B_R \end{pmatrix} \rightarrow \begin{pmatrix} B_0 \mid B_1 \mid B_2 \end{pmatrix}, \begin{pmatrix} C_L \mid C_R \end{pmatrix} \rightarrow \begin{pmatrix} C_0 \mid C_1 \mid C_2 \end{pmatrix}
where B_1 has b columns, C_1 has b columns
   5a
    6
    8
    7

\frac{B \to \begin{pmatrix} B_L \mid B_R \end{pmatrix} \leftarrow \begin{pmatrix} B_0 \mid B_1 \mid B_2 \end{pmatrix}, C \to \begin{pmatrix} C_L \mid C_R \end{pmatrix} \leftarrow \begin{pmatrix} C_0 \mid C_1 \mid C_2 \end{pmatrix}}{\begin{pmatrix} C_L \mid C_R \end{pmatrix} = \begin{pmatrix} AB_L + \hat{C}_L \mid \hat{C}_R \end{pmatrix}}

  5b
    2
                   endwhile
                            (C_L \mid C_R) = (AB_L + \widehat{C}_L \mid \widehat{C}_R) \land \neg (n(B_L) < n(B))
  2,3
                   \{C = AB + \widehat{C}
  1b
```

Step	Algorithm: $C := AB + C$
1a	${C = \widehat{C}}$
4	$B \to \begin{pmatrix} B_L & B_R \end{pmatrix}$, $C \to \begin{pmatrix} C_L & C_R \end{pmatrix}$ where B_L has 0 columns, C_L has 0 columns
2	$\left\{ \left(\begin{array}{c c} C_L & C_R \end{array} \right) = \left(\begin{array}{c c} AB_L + \widehat{C}_L & \widehat{C}_R \end{array} \right) $
3	while $n(B_L) < n(B)$ do
2,3	$\left\{ \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \wedge n(B_L) < n(B) \right\}$
5a	Determine block size b $\begin{pmatrix} B_L \mid B_R \end{pmatrix} \rightarrow \begin{pmatrix} B_0 \mid B_1 \mid B_2 \end{pmatrix}, \begin{pmatrix} C_L \mid C_R \end{pmatrix} \rightarrow \begin{pmatrix} C_0 \mid C_1 \mid C_2 \end{pmatrix}$ where B_1 has b columns, C_1 has b columns
6	$\left\{ \left(\begin{array}{cc} C_0 & C_1 & C_2 \end{array} \right) = \left(\begin{array}{cc} AB_0 + \widehat{C}_0 & \widehat{C}_1 & \widehat{C}_2 \end{array} \right) $
8	
7	
5b	$B \to \begin{pmatrix} B_L \middle B_R \end{pmatrix} \leftarrow \begin{pmatrix} B_0 \middle B_1 \middle B_2 \end{pmatrix}, C \to \begin{pmatrix} C_L \middle C_R \end{pmatrix} \leftarrow \begin{pmatrix} C_0 \middle C_1 \middle C_2 \end{pmatrix}$ $\left\{ \begin{pmatrix} C_L \middle C_R \end{pmatrix} = \begin{pmatrix} AB_L + \widehat{C}_L \middle \widehat{C}_R \end{pmatrix} \right\}$
2	$\left\{ \left. \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \right. \right\}$
	endwhile
2,3	$\left\{ \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \land \neg (n(B_L) < n(B)) \right\}$
1b	$\left\{ C = AB + \widehat{C} \right\}$

Step	Algorithm: $C := AB + C$
1a	$\{C = \widehat{C}$
4	$B \to \begin{pmatrix} B_L \mid B_R \end{pmatrix}$, $C \to \begin{pmatrix} C_L \mid C_R \end{pmatrix}$ where B_L has 0 columns, C_L has 0 columns
2	$\left\{ \left(\begin{array}{c c} C_L & C_R \end{array} \right) = \left(\begin{array}{c c} AB_L + \widehat{C}_L & \widehat{C}_R \end{array} \right) $
3	while $n(B_L) < n(B)$ do
2,3	$\left\{ \left(C_L \mid C_R \right) = \left(AB_L + \widehat{C}_L \mid \widehat{C}_R \right) \wedge n(B_L) < n(B) \right\}$
5a	Determine block size b $\begin{pmatrix} B_L \mid B_R \end{pmatrix} \rightarrow \begin{pmatrix} B_0 \mid B_1 \mid B_2 \end{pmatrix}, \begin{pmatrix} C_L \mid C_R \end{pmatrix} \rightarrow \begin{pmatrix} C_0 \mid C_1 \mid C_2 \end{pmatrix}$ where B_1 has b columns, C_1 has b columns
6	$\left\{ \left(\begin{array}{cc} C_0 & C_1 & C_2 \end{array} \right) = \left(\begin{array}{cc} AB_0 + \widehat{C}_0 & \widehat{C}_1 & \widehat{C}_2 \end{array} \right) \right.$
8	
7	$\left\{ \left(\begin{array}{cc} C_0 & C_1 & C_2 \end{array} \right) = \left(\begin{array}{cc} AB_0 + \widehat{C}_0 & AB_1 + \widehat{C}_1 & \widehat{C}_2 \end{array} \right) $
5b	$B \to \left(\begin{array}{c c} B_L & B_R \end{array} \right) \leftarrow \left(\begin{array}{c c} B_0 & B_1 & B_2 \end{array} \right), C \to \left(\begin{array}{c c} C_L & C_R \end{array} \right) \leftarrow \left(\begin{array}{c c} C_0 & C_1 & C_2 \end{array} \right)$
2	$\left\{ \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \right\}$
	endwhile
2,3	$\left\{ \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \land \neg (n(B_L) < n(B)) \right\}$
1b	$\{C = AB + \widehat{C} $

Step	Algorithm: $C := AB + C$
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3	while $n(B_L) < n(B)$ do
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6	$\left\{ \left(\begin{array}{cc} C_0 & C_1 & C_2 \end{array} \right) = \left(\begin{array}{cc} AB_0 + \widehat{C}_0 & \widehat{C}_1 & \widehat{C}_2 \end{array} \right) \right.$
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2	$\left\{ \left. \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \right. \right\}$
	endwhile
2,3	$\left\{ \left(C_L \middle C_R \right) = \left(AB_L + \widehat{C}_L \middle \widehat{C}_R \right) \land \neg (n(B_L) < n(B)) \right\}$
1b	$\{C = AB + \widehat{C} $

Algorithm: $C := AB + C$
$B \to \begin{pmatrix} B_L \mid B_R \end{pmatrix}$, $C \to \begin{pmatrix} C_L \mid C_R \end{pmatrix}$ where B_L has 0 columns, C_L has 0 columns
while $n(B_L) < n(B)$ do
Determine block size b $\begin{pmatrix} B_L \middle B_R \end{pmatrix} \rightarrow \begin{pmatrix} B_0 \middle B_1 \middle B_2 \end{pmatrix}, \begin{pmatrix} C_L \middle C_R \end{pmatrix} \rightarrow \begin{pmatrix} C_0 \middle C_1 \middle C_2 \end{pmatrix}$ where B_1 has b columns, C_1 has b columns
$C_1 := AB_1 + C_1$
$B \to \left(\begin{array}{c c} B_L & B_R \end{array} \right) \leftarrow \left(\begin{array}{c c} B_0 & B_1 & B_2 \end{array} \right), C \to \left(\begin{array}{c c} C_L & C_R \end{array} \right) \leftarrow \left(\begin{array}{c c} C_0 & C_1 & C_2 \end{array} \right)$
endwhile

Algorithm:
$$C := AB + C$$

$$B \to \begin{pmatrix} B_L \mid B_R \end{pmatrix}, C \to \begin{pmatrix} C_L \mid C_R \end{pmatrix}$$
where B_L has 0 columns, C_L has 0 columns
while $n(B_L) < n(B)$ do
$$Determine block size b$$

$$\begin{pmatrix} B_L \mid B_R \end{pmatrix} \to \begin{pmatrix} B_0 \mid B_1 \mid B_2 \end{pmatrix}, \begin{pmatrix} C_L \mid C_R \end{pmatrix} \to \begin{pmatrix} C_0 \mid C_1 \mid C_2 \end{pmatrix}$$
where B_1 has b columns, C_1 has b columns
$$C_1 := AB_1 + C_1$$

$$B \to \begin{pmatrix} B_L \mid B_R \end{pmatrix} \leftarrow \begin{pmatrix} B_0 \mid B_1 \mid B_2 \end{pmatrix}, C \to \begin{pmatrix} C_L \mid C_R \end{pmatrix} \leftarrow \begin{pmatrix} C_0 \mid C_1 \mid C_2 \end{pmatrix}$$
endwhile