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

Step	Algorithm: $C := AB + C$
1a	$\{$ $\}$
4	where
2	$\{$ $\}$
3	while do
2,3	$\{$ $\wedge$ $\}$
5a	**Determine block size** b where
6	$\{$ $\}$
8	
7	$\{$ $\}$
5b	
2	$\{$ $\}$
	endwhile
2,3	$\{$ $\wedge \neg($ $)$ $\}$
1b	$\{$ $\}$

Step	Algorithm: $C := AB + C$
1a	$\{C = \widehat{C}$ $\}$
4	where
2	$\{$ $\}$
3	while do
2,3	$\{$ $\wedge$ $\}$
5a	**Determine block size** b where
6	$\{$ $\}$
8	
7	$\{$ $\}$
5b	
2	$\{$ $\}$
	endwhile
2,3	$\{$ $\wedge \neg($ $)$ $\}$
1b	$\{C = AB + \widehat{C}$ $\}$

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

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

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

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

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

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

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

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