Step	Algorithm: $C := AB + C$
1a	$\{ C = \widehat{C} \}$
4	$B \rightarrow \left(B_L \,\middle\|\, B_R \right)$, $C \rightarrow \left(C_L \,\middle\|\, C_R \right)$ 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	$\left\{ \left(C_L \,\middle\|\, C_R \right) = \left(AB_L + \widehat{C}_L \,\middle\|\, \widehat{C}_R \right) \wedge n(B_L) < n(B) \right\}$
5a	$\left(B_L \,\middle\|\, B_R \right) \rightarrow \left(B_0 \,\middle\|\, b_1 \;\; B_2 \right)$, $\left(C_L \,\middle\|\, C_R \right) \rightarrow \left(C_0 \,\middle\|\, c_1 \;\; C_2 \right)$ where b_1 has 1 column, c_1 has 1 column
6	$\left\{ \left(C_0 \;\; c_1 \;\; C_2 \right) = \left(AB_0 + \widehat{C}_0 \;\; \widehat{c}_1 \;\; \widehat{C}_2 \right) \right\}$
8	$c_1 := Ab_1 + c_1$
7	$\left\{ \left(C_0 \;\; c_1 \;\; C_2 \right) = \left(AB_0 + \widehat{C}_0 \;\; Ab_1 + \widehat{c}_1 \;\; \widehat{C}_2 \right) \right\}$
5b	$B \rightarrow \left(B_L \,\middle\|\, B_R \right) \leftarrow \left(B_0 \;\; b_1 \,\middle\|\, B_2 \right)$, $C \rightarrow \left(C_L \,\middle\|\, C_R \right) \leftarrow \left(C_0 \;\; c_1 \,\middle\|\, C_2 \right)$
2	$\left\{ \left(C_L \,\middle\|\, C_R \right) = \left(AB_L + \widehat{C}_L \,\middle\|\, \widehat{C}_R \right) \right\}$
	endwhile
2,3	$\left\{ \left(C_L \,\middle\|\, C_R \right) = \left(AB_L + \widehat{C}_L \,\middle\|\, \widehat{C}_R \right) \wedge \neg(n(B_L) < n(B)) \right\}$
1b	$\{ C = AB + \widehat{C}) \}$

Step	Algorithm: $C := AB + C$
1a	$\{ \qquad \}$
4	where
2	$\left\{ \qquad \right\}$
3	while do
2,3	$\left\{ \quad \wedge \quad \right\}$
5a	where
6	$\left\{ \qquad \right\}$
8	
7	$\left\{ \qquad \right\}$
5b	
2	$\left\{ \qquad \right\}$
	endwhile
2,3	$\left\{ \quad \wedge \neg(\quad) \quad \right\}$
1b	$\{ \qquad \}$

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

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

Step	Algorithm: $C := AB + C$
1a	$\{ C = \widehat{C} \qquad \}$
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 $n(B_L) < n(B)$ do
2,3	$\left\{ \left(C_L \,\middle\vert\, C_R \right) = \left(AB_L + \widehat{C}_L \,\middle\vert\, \widehat{C}_R \right) \wedge n(B_L) < n(B) \right\}$
5a	where
6	$\left\{ \qquad \right\}$
8	
7	$\left\{ \qquad \right\}$
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	$\left\{ \left(C_L \,\middle\vert\, C_R \right) = \left(AB_L + \widehat{C}_L \,\middle\vert\, \widehat{C}_R \right) \wedge \neg (n(B_L) < n(B)) \right\}$
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Step	Algorithm: $C := AB + C$
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4	$B \rightarrow \left(B_L \,\middle|\, B_R \right)$, $C \rightarrow \left(C_L \,\middle|\, C_R \right)$ where B_L has 0 columns, C_L has 0 columns
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6	$\{ \}$
8	
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5b	
2	$\left\{ \left(C_L \,\middle|\, C_R \right) = \left(AB_L + \widehat{C}_L \,\middle|\, \widehat{C}_R \right) \right\}$
	endwhile
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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	$\left(B_L \mid B_R \right) \rightarrow \left(B_0 \mid b_1 \;\; B_2 \right)$, $\left(C_L \mid C_R \right) \rightarrow \left(C_0 \mid c_1 \;\; C_2 \right)$ where b_1 has 1 column, c_1 has 1 column
6	$\{ \}$
8	
7	$\{ \}$
5b	$B \rightarrow \left(B_L \mid B_R \right) \leftarrow \left(B_0 \;\; b_1 \mid B_2 \right)$, $C \rightarrow \left(C_L \mid C_R \right) \leftarrow \left(C_0 \;\; c_1 \mid C_2 \right)$
2	$\left\{ \left(C_L \mid C_R \right) = \left(AB_L + \widehat{C}_L \mid \widehat{C}_R \right) \right\}$
	endwhile
2,3	$\left\{ \left(C_L \mid C_R \right) = \left(AB_L + \widehat{C}_L \mid \widehat{C}_R \right) \wedge \neg(n(B_L) < n(B)) \right\}$
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5a	$\left(B_L \,\middle|\, B_R \right) \rightarrow \left(B_0 \,\middle|\, b_1 \;\; B_2 \right)$, $\left(C_L \,\middle|\, C_R \right) \rightarrow \left(C_0 \,\middle|\, c_1 \;\; C_2 \right)$ where b_1 has 1 column, c_1 has 1 column
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7	$\{ \}$
5b	$B \rightarrow \left(B_L \,\middle|\, B_R \right) \leftarrow \left(B_0 \;\; b_1 \,\middle|\, B_2 \right)$, $C \rightarrow \left(C_L \,\middle|\, C_R \right) \leftarrow \left(C_0 \;\; c_1 \,\middle|\, C_2 \right)$
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	endwhile
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5a	$\left(B_L \,\middle\|\, B_R \right) \rightarrow \left(B_0 \,\middle\|\, b_1 \;\; B_2 \right)$, $\left(C_L \,\middle\|\, C_R \right) \rightarrow \left(C_0 \,\middle\|\, c_1 \;\; C_2 \right)$ where b_1 has 1 column, c_1 has 1 column
6	$\left\{ \left(C_0 \;\; c_1 \;\; C_2 \right) = \left(AB_0 + \widehat{C}_0 \;\; \widehat{c}_1 \;\; \widehat{C}_2 \right) \right\}$
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7	$\left\{ \left(C_0 \;\; c_1 \;\; C_2 \right) = \left(AB_0 + \widehat{C}_0 \;\; Ab_1 + \widehat{c}_1 \;\; \widehat{C}_2 \right) \right\}$
5b	$B \rightarrow \left(B_L \,\middle\|\, B_R \right) \leftarrow \left(B_0 \;\; b_1 \,\middle\|\, B_2 \right)$, $C \rightarrow \left(C_L \,\middle\|\, C_R \right) \leftarrow \left(C_0 \;\; c_1 \,\middle\|\, C_2 \right)$
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	endwhile
2,3	$\left\{ \left(C_L \,\middle\|\, C_R \right) = \left(AB_L + \widehat{C}_L \,\middle\|\, \widehat{C}_R \right) \wedge \neg(n(B_L) < n(B)) \right\}$
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5a	$\left(B_L \mid B_R \right) \rightarrow \left(B_0 \mid b_1 \;\; B_2 \right)$, $\left(C_L \mid C_R \right) \rightarrow \left(C_0 \mid c_1 \;\; C_2 \right)$ where b_1 has 1 column, c_1 has 1 column
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5b	$B \rightarrow \left(B_L \mid B_R \right) \leftarrow \left(B_0 \;\; b_1 \mid B_2 \right)$, $C \rightarrow \left(C_L \mid C_R \right) \leftarrow \left(C_0 \;\; c_1 \mid C_2 \right)$
2	$\left\{ \left(C_L \mid C_R \right) = \left(AB_L + \widehat{C}_L \mid \widehat{C}_R \right) \right\}$
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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
	$\left(\begin{array}{c\|c} B_L & B_R \end{array} \right) \rightarrow \left(\begin{array}{c\|cc} B_0 & b_1 & B_2 \end{array} \right)$, $\left(\begin{array}{c\|c} C_L & C_R \end{array} \right) \rightarrow \left(\begin{array}{c\|cc} C_0 & c_1 & C_2 \end{array} \right)$ where b_1 has 1 column, c_1 has 1 column
	$c_1 := Ab_1 + c_1$
	$B \rightarrow \left(\begin{array}{c\|c} B_L & B_R \end{array} \right) \leftarrow \left(\begin{array}{cc\|c} B_0 & b_1 & B_2 \end{array} \right)$, $C \rightarrow \left(\begin{array}{c\|c} C_L & C_R \end{array} \right) \leftarrow \left(\begin{array}{cc\|c} C_0 & c_1 & C_2 \end{array} \right)$
	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 $\left(\begin{array}{c\|c} B_L & B_R \end{array} \right) \rightarrow \left(\begin{array}{c\|cc} B_0 & b_1 & B_2 \end{array} \right)$, $\left(\begin{array}{c\|c} C_L & C_R \end{array} \right) \rightarrow \left(\begin{array}{c\|cc} C_0 & c_1 & C_2 \end{array} \right)$ where b_1 has 1 column, c_1 has 1 column
$c_1 := Ab_1 + c_1$
$B \rightarrow \left(\begin{array}{c\|c} B_L & B_R \end{array} \right) \leftarrow \left(\begin{array}{cc\|c} B_0 & b_1 & B_2 \end{array} \right)$, $C \rightarrow \left(\begin{array}{c\|c} C_L & C_R \end{array} \right) \leftarrow \left(\begin{array}{cc\|c} C_0 & c_1 & C_2 \end{array} \right)$ endwhile