

<b>a</b>	$\{(y = y_5), A_1, (y_5 = y_3), \neg(y_5 = y_4), (x_1 \geq 1), (y_3 = y_1), \\ \neg(y_3 = y_2), (x_2 \geq 1), ((y_1 = f_{11}), \neg(y_1 = f_{12}))\}$														
$\begin{array}{ll} (\neg A_1 \vee \neg(x_1 \geq 1) \vee \neg(x_2 \geq 1) \vee (y_1 = f_{11})) & \wedge( A_1 \vee \neg A_2 \vee (y_4 = f_3)) \\ \wedge(\neg A_1 \vee \neg(x_1 \geq 1) \vee (x_2 \geq 1) \vee (y_1 = f_{12})) & \wedge( A_1 \vee A_2 \vee (y_4 = f_4)) \\ \wedge(\neg A_1 \vee \neg(x_1 \geq 1) \vee \neg(y_1 = f_{11}) \vee \neg(y_1 = f_{12})) & \wedge( A_1 \vee \neg(y_4 = f_3) \vee \neg(y_4 = f_4)) \\ \wedge(\neg A_1 \vee (x_1 \geq 1) \vee \neg(x_2 \geq 2) \vee (y_2 = f_{21})) & \wedge(\neg A_1 \vee (y_5 = y_3)) \\ \wedge(\neg A_1 \vee (x_1 \geq 1) \vee (x_2 \geq 2) \vee (y_2 = f_{22})) & \wedge( A_1 \vee (y_5 = y_4)) \\ \wedge(\neg A_1 \vee (x_1 \geq 1) \vee \neg(y_2 = f_{21}) \vee \neg(y_2 = f_{22})) & \wedge(\neg(y_5 = y_3) \vee \neg(y_5 = y_4)) \\ \wedge(\neg A_1 \vee \neg(x_1 \geq 1) \vee (y_3 = y_1)) & \wedge( (y = y_5)) \\ \wedge(\neg A_1 \vee (x_1 \geq 1) \vee (y_3 = y_2)) & \\ \wedge(\neg A_1 \vee \neg(y_3 = y_1) \vee \neg(y_3 = y_2)) & \end{array}$															
<b>b</b>	$\{(y = y_5), A_1, (y_5 = y_3), \neg(y_5 = y_4), (x_1 \geq 1), (y_3 = y_1), \\ \neg(y_3 = y_2), \neg(x_2 \geq 1), (y_1 = f_{12}), \neg(y_1 = f_{11}))\}$														
$\begin{array}{ll} (\neg A_1 \vee \neg(x_1 \geq 1) \vee \neg(x_2 \geq 1) \vee (y_1 = f_{11})) & \wedge( A_1 \vee \neg A_2 \vee (y_4 = f_3)) \\ \wedge(\neg A_1 \vee \neg(x_1 \geq 1) \vee (x_2 \geq 1) \vee (y_1 = f_{12})) & \wedge( A_1 \vee A_2 \vee (y_4 = f_4)) \\ \wedge(\neg A_1 \vee \neg(x_1 \geq 1) \vee \neg(y_1 = f_{11}) \vee \neg(y_1 = f_{12})) & \wedge( A_1 \vee \neg(y_4 = f_3) \vee \neg(y_4 = f_4)) \\ \wedge(\neg A_1 \vee (x_1 \geq 1) \vee \neg(x_2 \geq 2) \vee (y_2 = f_{21})) & \wedge(\neg A_1 \vee (y_5 = y_3)) \\ \wedge(\neg A_1 \vee (x_1 \geq 1) \vee (x_2 \geq 2) \vee (y_2 = f_{22})) & \wedge( A_1 \vee (y_5 = y_4)) \\ \wedge(\neg A_1 \vee (x_1 \geq 1) \vee \neg(y_2 = f_{21}) \vee \neg(y_2 = f_{22})) & \wedge(\neg(y_5 = y_3) \vee \neg(y_5 = y_4)) \\ \wedge(\neg A_1 \vee \neg(x_1 \geq 1) \vee (y_3 = y_1)) & \wedge( (y = y_5)) \\ \wedge(\neg A_1 \vee (x_1 \geq 1) \vee (y_3 = y_2)) & \wedge(\neg A_1 \vee \neg(x_1 \geq 1) \vee \neg(x_2 \geq 1)) \\ \wedge(\neg A_1 \vee \neg(y_3 = y_1) \vee \neg(y_3 = y_2)) & \end{array}$															
<b>c</b>	$\mathcal{TA}(\exists \mathbf{xy}.(\varphi \wedge \chi \wedge \llbracket y = \dot{w} \rrbracket_{\mathcal{EUF}}))$														
	<table><tr><th>Assignment</th><th>Labeling</th></tr><tr><td><math>\chi \cup \{ A_1, (x_1 \geq 1), (x_2 \geq 1) \}</math></td><td><math>y = y_5 = y_3 = y_1 = f_{11}</math></td></tr><tr><td><math>\chi \cup \{ A_1, (x_1 \geq 1), \neg(x_2 \geq 1) \}</math></td><td><math>y = y_5 = y_3 = y_1 = f_{12}</math></td></tr><tr><td><math>\chi \cup \{ A_1, \neg(x_1 \geq 1), (x_2 \geq 2) \}</math></td><td><math>y = y_5 = y_3 = y_2 = f_{21}</math></td></tr><tr><td><math>\chi \cup \{ A_1, \neg(x_1 \geq 1), \neg(x_2 \geq 2) \}</math></td><td><math>y = y_5 = y_3 = y_2 = f_{22}</math></td></tr><tr><td><math>\chi \cup \{ \neg A_1, A_2 \}</math></td><td><math>y = y_5 = y_4 = f_3</math></td></tr><tr><td><math>\chi \cup \{ \neg A_1, \neg A_2 \}</math></td><td><math>y = y_5 = y_4 = f_4</math></td></tr></table>	Assignment	Labeling	$\chi \cup \{ A_1, (x_1 \geq 1), (x_2 \geq 1) \}$	$y = y_5 = y_3 = y_1 = f_{11}$	$\chi \cup \{ A_1, (x_1 \geq 1), \neg(x_2 \geq 1) \}$	$y = y_5 = y_3 = y_1 = f_{12}$	$\chi \cup \{ A_1, \neg(x_1 \geq 1), (x_2 \geq 2) \}$	$y = y_5 = y_3 = y_2 = f_{21}$	$\chi \cup \{ A_1, \neg(x_1 \geq 1), \neg(x_2 \geq 2) \}$	$y = y_5 = y_3 = y_2 = f_{22}$	$\chi \cup \{ \neg A_1, A_2 \}$	$y = y_5 = y_4 = f_3$	$\chi \cup \{ \neg A_1, \neg A_2 \}$	$y = y_5 = y_4 = f_4$
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