$f_{11} = 1 + x_{16} + x_{15}x_{16} + x_{14} + x_{14}x_{16} + x_{13}x_{15} + x_{13}x_{14}x_{15} + x_{12} + x_{12}x_{16} + x_{13}x_{16} + x_{14}x_{16} + x_{15}x_{16} + x_{$  $x_{12}x_{14}x_{16} + x_{12}x_{14}x_{15} + x_{12}x_{14}x_{15}x_{16} + x_{12}x_{13}x_{15} + x_{12}x_{13}x_{14} + x_{12}x_{13}x_{14}x_{15} + \\$  $x_{11}x_{16} + x_{11}x_{15} + x_{11}x_{15}x_{16} + x_{11}x_{14}x_{16} + x_{11}x_{14}x_{15}x_{16} + x_{11}x_{13} + x_{11}x_{13}x_{15}x_{16} +$  $x_{11}x_{13}x_{14}x_{16} + x_{11}x_{12} + x_{10} + x_{10}x_{16} + x_{10}x_{14} + x_{10}x_{14}x_{15} + x_{10}x_{14}x_{15}x_{16} +$  $x_{10}x_{13}x_{16} + x_{10}x_{13}x_{14} + x_{10}x_{13}x_{14}x_{15} + x_{10}x_{13}x_{14}x_{15}x_{16} + x_{10}x_{12}x_{16} + x_{10}x_{12}x_{14} +$  $x_{10}x_{12}x_{14}x_{15} + x_{10}x_{12}x_{14}x_{15}x_{16} + x_{10}x_{12}x_{13}x_{14} + x_{10}x_{12}x_{13}x_{14}x_{15} + x_{10}x_{11}x_{16} + x_{10}x_{12}x_{13}x_{14}x_{15} + x_{10}x_{12}x_{14}x_{15}x_{15} + x_{10}x_{12}x_{13}x_{14}x_{15} + x_{10}x_{12}x_{14}x_{15} + x_{10}x_{12}x_{14}x_{15} + x_{10}x_{12}x_{14}x_{15} + x_{10}x_{12}x_{14}x_{15} + x_{10}x_{14}x_{15}x_{15} + x_{10}x_{14}x_{15}x_{15} + x_{10}x_{15}x_{15}x_{15} + x_{10}x_{15}x_{15}x_{15}x_{15}x_{15} + x_{10}x_{15}x$  $x_{10}x_{11}x_{14} + x_{10}x_{11}x_{14}x_{15} + x_{10}x_{11}x_{14}x_{15}x_{16} + x_{10}x_{11}x_{13}x_{14} + x_{10}x_{11}x_{13}x_{14}x_{15} +$  $x_9 + x_9 x_{15} x_{16} + x_9 x_{14} x_{16} + x_9 x_{13} x_{15} x_{16} + x_9 x_{13} x_{14} + x_9 x_{13} x_{14} x_{15} + x_9 x_{13} x_{14} x_{15} + x_{16} + x_{16} x_{16} +$  $x_9x_{12}x_{15}x_{16} + x_9x_{12}x_{14}x_{16} + x_9x_{12}x_{13} + x_9x_{12}x_{13}x_{15} + x_9x_{12}x_{13}x_{15} + x_9x_{12}x_{13}x_{16} + x_9x_{11}x_{15}x_{16} + x_9x_{12}x_{13}x_{15} + x_9x_{12}x_{13} + x_9x_{12}x$  $x_9x_{11}x_{14}x_{16} + x_9x_{11}x_{13} + x_9x_{11}x_{13}x_{15} + x_9x_{11}x_{13}x_{15} + x_9x_{10} + x_9x_{10} + x_9x_{10}x_{15} + x_9x_{10}x_{10} + x_9x$  $x_9x_{10}x_{15}x_{16} + x_9x_{10}x_{14}x_{15} + x_9x_{10}x_{13} + x_9x_{10}x_{13}x_{15} + x_9x_{10}x_{13}x_{15} + x_9x_{10}x_{13}x_{14} + x_9x_{10}x_{13}x_{15} + x_9x_{10}x_{15} + x_9x$  $x_9x_{10}x_{13}x_{14}x_{16} + x_9x_{10}x_{13}x_{14}x_{15} + x_9x_{10}x_{12} + x_9x_{10}x_{11} + x_8 + x_8x_{16} + x_8x_{14}x_{16} + x_8x_{14}x_{16} + x_8x_{16} + x_8x_{16}$  $x_8x_{14}x_{15} + x_8x_{14}x_{15}x_{16} + x_8x_{13}x_{15} + x_8x_{13}x_{14} + x_8x_{13}x_{14}x_{15} + x_8x_{11} + x_8x_{10}x_{16} + x_8x$  $x_8x_{10}x_{14} + x_8x_{10}x_{14}x_{15} + x_8x_{10}x_{14}x_{15}x_{16} + x_8x_{10}x_{13}x_{14} + x_8x_{10}x_{13}x_{14}x_{15} +$  $x_8x_9x_{15}x_{16} + x_8x_9x_{14}x_{16} + x_8x_9x_{13} + x_8x_9x_{13}x_{15} + x_8x_9x_{13}x_{15}x_{16} + x_8x_9x_{10} + \\$  $x_7 + x_7x_{16} + x_7x_{15} + x_7x_{15}x_{16} + x_7x_{14}x_{16} + x_7x_{14}x_{15}x_{16} + x_7x_{13} + x_7x_{13}x_{15}x_{16} +$  $x_7x_{13}x_{14}x_{16} + x_7x_{12} + x_7x_{10}x_{16} + x_7x_{10}x_{14} + x_7x_{10}x_{14}x_{15} + x_7x_{10}x_{14}x_{15}x_{16} +$  $x_7x_{10}x_{13}x_{14} + x_7x_{10}x_{13}x_{14}x_{15} + x_7x_9x_{15}x_{16} + x_7x_9x_{14}x_{16} + x_7x_9x_{13} + x_7x_9x_{13}x_{15} +$  $x_7x_9x_{13}x_{15}x_{16} + x_7x_9x_{10} + x_7x_8 + x_6 + x_6x_{16} + x_6x_{14} + x_6x_{14}x_{15} + x_6x_{14}x_{15}x_{16} + x_6x_{14}x_{15} + x_6x_{14}x_{1$  $x_6x_{13}x_{16} + x_6x_{13}x_{14} + x_6x_{13}x_{14}x_{15} + x_6x_{13}x_{14}x_{15}x_{16} + x_6x_{12}x_{16} + x_6x_{12}x_{14} +$  $x_6x_{12}x_{14}x_{15} + x_6x_{12}x_{14}x_{15}x_{16} + x_6x_{12}x_{13}x_{14} + x_6x_{12}x_{13}x_{14}x_{15} + x_6x_{11}x_{16} + x_6x_{12}x_{13}x_{14}x_{15} + x_6x_{11}x_{16} + x_6x_{12}x_{13}x_{14}x_{15} + x_6x_{12}x_{13}x_{14}x_{15} + x_6x_{11}x_{16} + x_6x_{12}x_{13}x_{14} + x_6x_{12}x_{13}x_{14}x_{15} + x_6x_{11}x_{16} + x_6x_{12}x_{13}x_{14} + x_6x_{12}x_{14}x_{15} + x_6x_{12}x_{14}x$  $x_6x_{11}x_{14} + x_6x_{11}x_{14}x_{15} + x_6x_{11}x_{14}x_{15}x_{16} + x_6x_{11}x_{13}x_{14} + x_6x_{11}x_{13}x_{14}x_{15} + x_6x_{11}x_{14}x_{15}x_{16} + x_6x_{11}x_{14}x_{15} + x_6x_{11}x_{14}x$  $x_6x_9 + x_6x_9x_{15} + x_6x_9x_{15}x_{16} + x_6x_9x_{14}x_{15} + x_6x_9x_{13} + x_6x_9x_{13}x_{15} + x_6x_9x_{15} + x_6x_9x_{15}$  $x_6x_9x_{13}x_{14} + x_6x_9x_{13}x_{14}x_{16} + x_6x_9x_{13}x_{14}x_{15} + x_6x_9x_{12} + x_6x_9x_{11} + x_6x_8x_{16} + x_6x_9x_{13}x_{14}x_{16} + x_6x_9x_{16}x_{16} + x_6x_9x_{16}x$  $x_6x_8x_{14} + x_6x_8x_{14}x_{15} + x_6x_8x_{14}x_{15}x_{16} + x_6x_8x_{13}x_{14} + x_6x_8x_{13}x_{14}x_{15} + x_6x_8x_{9} + \\$  $x_6x_7x_{16} + x_6x_7x_{14} + x_6x_7x_{14}x_{15} + x_6x_7x_{14}x_{15}x_{16} + x_6x_7x_{13}x_{14} + x_6x_7x_{13}x_{14}x_{15} + \\$  $x_6x_7x_9 + x_5 + x_5x_{15}x_{16} + x_5x_{14}x_{16} + x_5x_{13}x_{15}x_{16} + x_5x_{13}x_{14} + x_5x_{13}x_{14}x_{15} +$  $x_5x_{13}x_{14}x_{15}x_{16} + x_5x_{12}x_{15}x_{16} + x_5x_{12}x_{14}x_{16} + x_5x_{12}x_{13} + x_5x_{12}x_{13}x_{15} + x_5x$  $x_5x_{11}x_{15}x_{16} + x_5x_{11}x_{14}x_{16} + x_5x_{11}x_{13} + x_5x_{11}x_{13}x_{15} + x_5x_{11}x_{13}x_{15} + x_5x_{10} + x_5x_{10} + x_5x_{10}x_{10} + x_5x_{10}x_{10}$  $x_5x_{10}x_{15} + x_5x_{10}x_{15}x_{16} + x_5x_{10}x_{14}x_{15} + x_5x_{10}x_{13} + x_5x_{10}x_{13}x_{15} + x_5x_{10}x_{15} + x_5x_{10}x_{15} + x_5x_{10}x_{15} + x_5x_{10}x_{15} + x_5x_{10}x_{15}$  $x_5x_{10}x_{13}x_{14} + x_5x_{10}x_{13}x_{14}x_{16} + x_5x_{10}x_{13}x_{14}x_{15} + x_5x_{10}x_{12} + x_5x_{10}x_{11} + x_5x_8x_{15}x_{16} + x_5x_{10}x_{13}x_{14} + x_5x_{10}x_{14} + x$  $x_5x_8x_{14}x_{16} + x_5x_8x_{13} + x_5x_8x_{13}x_{15} + x_5x_8x_{13}x_{15}x_{16} + x_5x_8x_{10} + x_5x_7x_{15}x_{16} +$  $x_5x_7x_{14}x_{16} + x_5x_7x_{13} + x_5x_7x_{13}x_{15} + x_5x_7x_{13}x_{15}x_{16} + x_5x_7x_{10} + x_5x_6 + x_5x_6x_{15} + x_5x_7x_{13}x_{15} + x_5x_7x_{15} + x_5x_7x_{1$  $x_5x_6x_{15}x_{16} + x_5x_6x_{14}x_{15} + x_5x_6x_{13} + x_5x_6x_{13}x_{15} + x_5x_6x_{13}x_{15} + x_{16} + x_5x_6x_{13}x_{14} + x_{15}x_6x_{13}x_{15} + x_{16}x_{13}x_{15} + x_{16}x_{13}x_{16} + x_{16}x_{13}x_{16} + x_{16}x_{13}x_{16} + x_{16}x_{13}x_{16} + x_{16}x_{16}x_{13}x_{16} + x_{16}x_{16}x_{16}x_{16} + x_{16}x_{16}x_{16}x_{16} + x_{16}x_{16}x_{16}x_{16} + x_{16}x_{16}x_{16}x_{16}x_{16} + x_{16}x_{16}x_{16}x_{16}x_{16}x_{16} + x_{16}x_{1$  $x_5x_6x_{13}x_{14}x_{16} + x_5x_6x_{13}x_{14}x_{15} + x_5x_6x_{12} + x_5x_6x_{11} + x_5x_6x_8 + x_5x_6x_7 + x_4 + x_5x_6x_{13}x_{14}x_{15} + x_5x_6x_{12} + x_5x_6x_{11} + x_5x_6x_8 + x_5x_6x_7 + x_4 + x_5x_6x_{13}x_{14}x_{15} + x_5x_6x_{12} + x_5x_6x_{11} + x_5x_6x_8 + x_5x_6x_7 + x_4 + x_5x_6x_8 + x_5x_6x_7 + x_4 + x_5x_6x_8 + x_5x_6x_8 + x_5x_6x_7 + x_4 + x_5x_6x_8 + x_5x_6x_8 + x_5x_6x_7 + x_5x_6x_8 + x_5x_6x_8 + x_5x_6x_7 + x_5x_6x_8 + x_5x$  $x_4x_{16} + x_4x_{14}x_{16} + x_4x_{14}x_{15} + x_4x_{14}x_{15}x_{16} + x_4x_{13}x_{15} + x_4x_{13}x_{14} + x_4x_{13}x_{14}x_{15} + x_4x_{14}x_{15} + x_4x_{15}x_{15} + x_5x_{15}x_{15} + x_5x$  $x_4x_{11} + x_4x_{10}x_{16} + x_4x_{10}x_{14} + x_4x_{10}x_{14}x_{15} + x_4x_{10}x_{14}x_{15}x_{16} + x_4x_{10}x_{13}x_{14} + x_4x_{10}x_{14}x_{15}x_{16} + x_4x_{10}x_{16}x_{16}x_{16}x_{16} + x_4x_{10}x_{16}x_{16}x_{16}x_{16}x_{16}x_{16} + x_4x_{10}x_{16}x$  $x_4x_{10}x_{13}x_{14}x_{15} + x_4x_9x_{15}x_{16} + x_4x_9x_{14}x_{16} + x_4x_9x_{13} + x_4x_9x_{13}x_{15} + x_4x_9x_{13}x_{15} + x_4x_9x_{15}x_{16} + x_4x_9x_{14}x_{16} + x_4x_9x_{13} + x_4x_9x_{15}x_{16} + x_4x_9x_{15}x_{16} + x_4x_9x_{16} + x$  $x_4x_9x_{10} + x_4x_7 + x_4x_6x_{16} + x_4x_6x_{14} + x_4x_6x_{14}x_{15} + x_4x_6x_{14}x_{15}x_{16} + x_4x_6x_{13}x_{14} +$  $x_4x_6x_{13}x_{14}x_{15} + x_4x_6x_9 + x_4x_5x_{15}x_{16} + x_4x_5x_{14}x_{16} + x_4x_5x_{13} + x_4x_5x_{13}x_{15} + \\$  $x_4x_5x_{13}x_{15}x_{16} + x_4x_5x_{10} + x_4x_5x_6 + x_3x_{16} + x_3x_{15} + x_3x_{15}x_{16} + x_3x_{14}x_{16} + x_{15}x_{16} + x_{15}x_{1$  $x_3x_{14}x_{15}x_{16} + x_3x_{13} + x_3x_{13}x_{15}x_{16} + x_3x_{13}x_{14}x_{16} + x_3x_{12} + x_3x_{10}x_{16} + x_3x_{10}x_{14} + x_3x_{10}x_{16} + x_3x$  $x_3x_{10}x_{14}x_{15} + x_3x_{10}x_{14}x_{15}x_{16} + x_3x_{10}x_{13}x_{14} + x_3x_{10}x_{13}x_{14}x_{15} + x_3x_9x_{15}x_{16} +$  $x_3x_9x_{14}x_{16} + x_3x_9x_{13} + x_3x_9x_{13}x_{15} + x_3x_9x_{13}x_{15}x_{16} + x_3x_9x_{10} + x_3x_8 + x_3x_6x_{16} + x_3x_9x_{10} + x$  $x_3x_6x_{14} + x_3x_6x_{14}x_{15} + x_3x_6x_{14}x_{15}x_{16} + x_3x_6x_{13}x_{14} + x_3x_6x_{13}x_{14}x_{15} + x_3x_6x_9 + \\$  $x_3x_5x_{15}x_{16} + x_3x_5x_{14}x_{16} + x_3x_5x_{13} + x_3x_5x_{13}x_{15} + x_3x_5x_{13}x_{15}x_{16} + x_3x_5x_{10} + x_3x_5x_{10}x_{10} + x_3x_5x_{10}x$ 

 $x_3x_5x_6 + x_3x_4 + x_2 + x_2x_{16} + x_2x_{14} + x_2x_{14}x_{15} + x_2x_{14}x_{15}x_{16} + x_2x_{13}x_{16} +$  $x_2x_{13}x_{14} + x_2x_{13}x_{14}x_{15} + x_2x_{13}x_{14}x_{15}x_{16} + x_2x_{12}x_{16} + x_2x_{12}x_{14} + x_2x_{12}x_{14}x_{15} + x_2x_{12}x_{14}x$  $x_2x_{12}x_{14}x_{15}x_{16} + x_2x_{12}x_{13}x_{14} + x_2x_{12}x_{13}x_{14}x_{15} + x_2x_{11}x_{16} + x_2x_{11}x_{14} + x_2x_{11}x_{14}x_{15} + x_2x_{11}x_{16} + x_2x_{11}x_{14} + x_2x_{11}x_{14} + x_2x_{11}x_{16} + x_2x_{11}x$  $x_2x_{11}x_{14}x_{15}x_{16} + x_2x_{11}x_{13}x_{14} + x_2x_{11}x_{13}x_{14}x_{15} + x_2x_9 + x_2x_9x_{15} + x_2x_9x_{15}x_{16} + x_2x_{11}x_{13}x_{14} + x_2x_{11}x_{13}x_{1$  $x_2x_9x_{13}x_{14}x_{15} + x_2x_9x_{12} + x_2x_9x_{11} + x_2x_8x_{16} + x_2x_8x_{14} + x_2x_8x_{14}x_{15} + x_2x_8x_{14}x_{15} + x_2x_8x_{14} + x_2x_8x_{1$  $x_2x_8x_{13}x_{14} + x_2x_8x_{13}x_{14}x_{15} + x_2x_8x_9 + x_2x_7x_{16} + x_2x_7x_{14} + x_2x_7x_{14}x_{15} +$  $x_2x_5x_{15}x_{16} + x_2x_5x_{14}x_{15} + x_2x_5x_{13} + x_2x_5x_{13}x_{15} + x_2x_5x_{13}x_{16} + x_2x_5x_{13}x_{14} + \\$  $x_2x_5x_{13}x_{14}x_{16} + x_2x_5x_{13}x_{14}x_{15} + x_2x_5x_{12} + x_2x_5x_{11} + x_2x_5x_8 + x_2x_5x_7 + x_2x_4x_{16} + x_2x_5x_{13}x_{14}x_{16} + x_2x_5x_{16}x_{16} + x$  $x_2x_4x_{14} + x_2x_4x_{14}x_{15} + x_2x_4x_{14}x_{15}x_{16} + x_2x_4x_{13}x_{14} + x_2x_4x_{13}x_{14}x_{15} + x_2x_4x_9 + \\$  $x_2x_4x_5 + x_2x_3x_{16} + x_2x_3x_{14} + x_2x_3x_{14}x_{15} + x_2x_3x_{14}x_{15}x_{16} + x_2x_3x_{13}x_{14} +$  $x_2x_3x_{13}x_{14}x_{15} + x_2x_3x_9 + x_2x_3x_5 + x_1 + x_1x_{15}x_{16} + x_1x_{14}x_{16} + x_1x_{13}x_{15}x_{16} + \\$  $x_1x_{13}x_{14} + x_1x_{13}x_{14}x_{15} + x_1x_{13}x_{14}x_{15}x_{16} + x_1x_{12}x_{15}x_{16} + x_1x_{12}x_{14}x_{16} + x_1x_{12}x_{13} + x_1x_{12}x_{13}x_{14} + x_1x_{12}x_{13}x_{14} + x_1x_{13}x_{14}x_{15} + x_1x_{13}x_{14}x_{15}x_{16} + x_1x_{12}x_{15}x_{16} + x_1x_{12}x_{14}x_{16} + x_1x_{12}x_{13} + x_1x_{13}x_{14}x_{15}x_{16} + x_1x_{12}x_{15}x_{16} + x_1x_{12}x_{14}x_{16} + x_1x_{12}x_{13}x_{14} + x_1x_{12}x_{13}x_{14} + x_1x_{12}x_{13}x_{14} + x_1x_{12}x_{13}x_{14} + x_1x_{12}x_{13}x_{14} + x_1x_{13}x_{14}x_{15}x_{16} + x_1x_{12}x_{15}x_{16} + x_1x_{15}x_{16} + x_1x_{15}x_{16}$  $x_1x_{12}x_{13}x_{15} + x_1x_{12}x_{13}x_{15}x_{16} + x_1x_{11}x_{15}x_{16} + x_1x_{11}x_{14}x_{16} + x_1x_{11}x_{13} + x_1x_{11}x_{13}x_{15} + x_1x_{11}x_{15}x_{15} + x_1x_{15}x_{15} + x_1x_{15}x_{15} + x_1x_{15}x_{15} + x_1x_{15}x_{15} + x_1x$  $x_1x_{11}x_{13}x_{15}x_{16} + x_1x_{10} + x_1x_{10}x_{15} + x_1x_{10}x_{15}x_{16} + x_1x_{10}x_{14}x_{15} + x_1x_{10}x_{13} + \\$  $x_1x_{10}x_{13}x_{15} + x_1x_{10}x_{13}x_{15}x_{16} + x_1x_{10}x_{13}x_{14} + x_1x_{10}x_{13}x_{14}x_{16} + x_1x_{10}x_{13}x_{14}x_{15} + \\$  $x_1x_{10}x_{12} + x_1x_{10}x_{11} + x_1x_8x_{15}x_{16} + x_1x_8x_{14}x_{16} + x_1x_8x_{13} + x_1x_8x_{13}x_{15} + x_1x_8x_{15} + x_1x_8x_{15}$  $x_1x_8x_{10} + x_1x_7x_{15}x_{16} + x_1x_7x_{14}x_{16} + x_1x_7x_{13} + x_1x_7x_{13}x_{15} + x_1x_7x_{13}x_{15}x_{16} +$  $x_1x_7x_{10} + x_1x_6 + x_1x_6x_{15} + x_1x_6x_{15}x_{16} + x_1x_6x_{14}x_{15} + x_1x_6x_{13} + x_1x_6x_{13}x_{15} + \\$  $x_1x_6x_{13}x_{15}x_{16} + x_1x_6x_{13}x_{14} + x_1x_6x_{13}x_{14}x_{16} + x_1x_6x_{13}x_{14}x_{15} + x_1x_6x_{12} + x_1x_6x_{11} + x_1x_6x_{13}x_{14}x_{15} + x_1x_6x_{12} + x_1x_6x_{13}x_{14}x_{16} + x_1x_6x_{13}x_{14}x_{15} + x_1x_6x_{12} + x_1x_6x_{13}x_{14}x_{16} + x_1x_6x_{13}x_{14}x_{15} + x_1x_6x_{12} + x_1x_6x_{13}x_{14}x_{15} + x_1x_6x_{15}x_{15} + x_1x$  $x_1x_6x_8 + x_1x_6x_7 + x_1x_4x_{15}x_{16} + x_1x_4x_{14}x_{16} + x_1x_4x_{13} + x_1x_4x_{13}x_{15} + x_1x_4x_{15}x_{15} + x_1x_5x_{15} + x_1x_5x_{15}$  $x_1x_4x_{10} + x_1x_4x_6 + x_1x_3x_{15}x_{16} + x_1x_3x_{14}x_{16} + x_1x_3x_{13} + x_1x_3x_{13}x_{15} + x_1x_3x_{13}x_{15} + x_1x_3x_{15}x_{16} + x_1x_3x_{16} + x_1x_3x_{16}$  $x_1x_3x_{10} + x_1x_3x_6 + x_1x_2 + x_1x_2x_{15} + x_1x_2x_{15}x_{16} + x_1x_2x_{14}x_{15} + x_1x_2x_{13} +$  $x_{1}x_{2}x_{13}x_{15} + x_{1}x_{2}x_{13}x_{15}x_{16} + x_{1}x_{2}x_{13}x_{14} + x_{1}x_{2}x_{13}x_{14}x_{16} + x_{1}x_{2}x_{13}x_{14}x_{15} + \\$  $x_1x_2x_{12} + x_1x_2x_{11} + x_1x_2x_8 + x_1x_2x_7 + x_1x_2x_4 + x_1x_2x_3$