

①

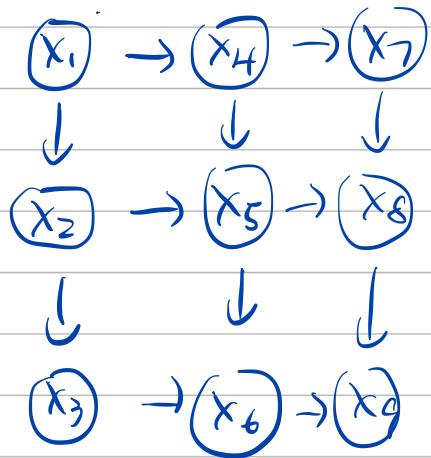
a) $p(x) = p(x_1) p(x_2|x_1) p(x_3|x_1, x_2) p(x_4|x_1, x_2, x_3) p(x_5|x_1, x_2, x_3, x_4)$
 $p(x_6|x_1, x_2, x_3, x_4, x_5, \quad) p(x_7|x_1, x_2, x_3, x_4, x_5, x_6)$
 $p(x_8|x_1, x_2, x_3, x_4, x_5, x_6, x_7) p(x_9|x_1, x_2, x_3, x_4, x_5, x_6, x_7, x_8)$

b) No

c)

$p(x) = p(x_1) p(x_2|x_1) p(x_3|\cancel{x_1}, x_2) p(x_4|x_1, \cancel{x_2}, \cancel{x_3}) p(x_5|\cancel{x_1}, \cancel{x_2}, \cancel{x_3}, x_4)$
 $p(x_6|\cancel{x_1}, \cancel{x_2}, \cancel{x_3}, x_4, x_5, \quad) p(x_7|\cancel{x_1}/\cancel{x_2}, \cancel{x_3}, x_4, x_5, x_6)$
 $p(x_8|x_1, \cancel{x_2}, \cancel{x_3}, \cancel{x_4}, x_5, \cancel{x_6}, x_7) p(x_9|x_1/\cancel{x_2}/\cancel{x_3}, \cancel{x_4}, \cancel{x_5}, x_6, \cancel{x_7}, x_8)$

d)



e) 9 parameters