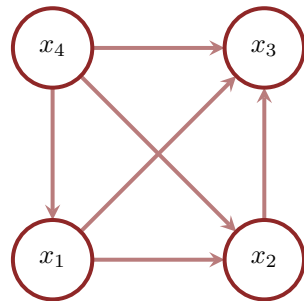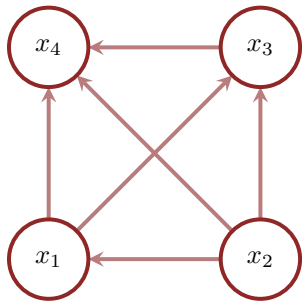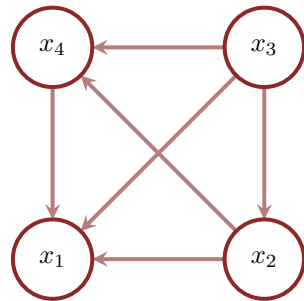$\pi(x_2 \mid x_1, x_3, x_4) \cdot \pi(x_1 \mid x_3, x_4) \cdot \pi(x_4 \mid x_3) \cdot \pi(x_3)$

$\pi(x_3 \mid x_1, x_2, x_4) \cdot \pi(x_2 \mid x_1, x_4) \cdot \pi(x_1 \mid x_4) \cdot \pi(x_4)$

$\pi(x_4 \mid x_1, x_2, x_3) \cdot \pi(x_3 \mid x_1, x_2) \cdot \pi(x_1 \mid x_2) \cdot \pi(x_2)$

$\pi(x_1 \mid x_2, x_3, x_4) \cdot \pi(x_4 \mid x_2, x_3) \cdot \pi(x_2 \mid x_3) \cdot \pi(x_3)$