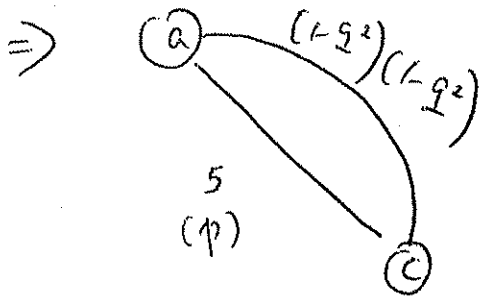
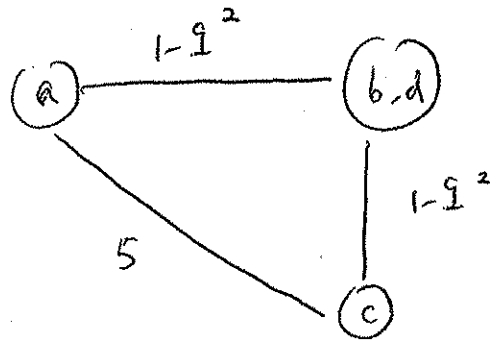
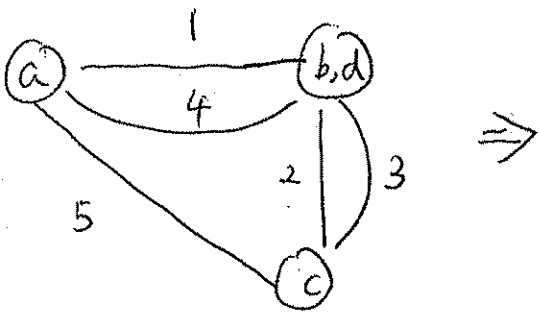


Rac?

① Decomposing on edge 6:

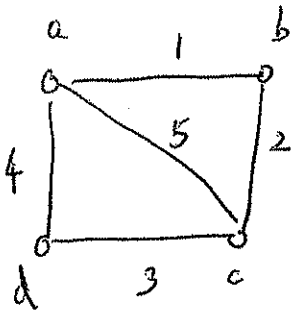
$$\begin{aligned} R_{ac} &= p(6) \cdot R(G_1) + q(6) \cdot R(G_2) \\ &= p \cdot R(G_1) + q \cdot R(G_2) \end{aligned}$$

②  $R(G_1)$ :  $G_1 = G - 6$

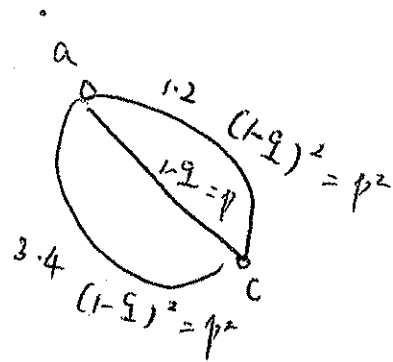


$$\begin{aligned} R(G_1) &= 1 - [1 - (1-q^2)(1-q^2)]q \\ &= 1 - [1 - (1-0.01)^2] \cdot 0.1 \\ &= 1 - 0.00199 = 0.99801 \end{aligned}$$

③  $R(G_2) = G_2 = G - 6$



$\Rightarrow$



$$\begin{aligned}
 R(G_2) &= 1 - (1-p^2)(1-p)(1-p^2) \quad p = 0.9 \\
 &= 1 - (1-0.81) \times 0.1 \times (1-0.81) \\
 &= 1 - 0.1 \times 0.19^2 = 0.99639
 \end{aligned}$$

④  $R_{ac} = 0.9 \times 0.99801 + 0.1 \times 0.99639$

$$= 0.997848$$