(1) A → C → Y

$P(A)=0.5$ $P(C|Y)=0.8$ $P(C|\sim Y)=0.6$
$P(Y|C)=0.8$ $P(Y|\sim C)=0.6$

Y	C	A	
0	0	0	0.08
0	0	1	0.04
0	1	0	0.06
0	1	1	0.08
1	0	0	0.12
1	0	1	0.06
1	1	0	0.24
1	1	1	0.32

$P(Y|C,A)=\frac{0.32}{0.4}=0.8$

$P(Y|C)=\frac{0.56}{0.7}=0.8$

$P(C|Y,A)=\frac{0.32}{0.38}\approx 0.84$

$P(C|Y)=\frac{0.56}{0.74}\approx 0.75$

(2) A → Y → C

$P(A)=0.5$ $P(Y|A)=0.3$ $P(Y|\sim A)=0.4$
$P(C|Y)=0.6$ $P(C|\sim Y)=0.7$

Y	C	A	
0	0	0	0.09
0	0	1	0.105
0	1	0	0.21
0	1	1	0.245
1	0	0	0.08
1	0	1	0.06
1	1	0	0.12
1	1	1	0.09

$P(C|YA)=\frac{0.09}{0.15}=0.6$

$P(C|Y)=\frac{0.21}{0.35}=0.6$

$P(Y|C,A)=\frac{0.09}{0.335}\approx 0.27$

$P(Y|C)=\frac{0.21}{0.665}\approx 0.31$