$$P(F=1 \mid C=1, M=1) = \frac{P(C=1, M=1 \mid F=1)\ P(F=1)}{P(C=1, M=1)}$$

$$\boxed{P(A,B) = P(A) \cdot P(B)}$$

$$P(A=1 \mid E=1, C=1) = \frac{P(E=1, C=1 \mid A=1)\ P(A=1)}{P(E=1, C=1)}$$

$$\boxed{P(A,B \mid C) = P(A \mid C) \cdot P(B \mid C)}$$

$$(1) \ \_\_\_ = \frac{P(E=1 \mid A=1) \cdot P(C=1 \mid A=1)\ P(A=1)}{P(E=1) \cdot P(C=1)}$$

$$\boxed{P(B \mid A) = \frac{P(A \text{ and } B)}{P(A)}}$$

$$P(C=1 \mid A=1) = \frac{P(C=1 \text{ and } A=1)}{P(A=1)} = \frac{P(C=1) * P(A=1)}{P(A=1)} = P(C$$

$$P(E=1 \mid A=1) = \frac{P(E=1 \text{ and } A=1)}{P(A=1)} = \frac{P(E=1) * P(A=1)}{P(A=1)} = P(E=1)$$

$$\text{From } (1) \ \_\_\_ = \frac{\cancel{P(E=1)} \cdot \cancel{P(C=1)}\ P(A=1)}{\cancel{P(E=1)}\ \cancel{P(C=1)}}$$

$$P(A=1 \mid E1, C=1) = P(A=1) = 0.3$$

∴ The botton line here is since A did not depend on either E or C

⇒ So Probability of A didnot change