**Question #15160**In a management trainee program,0. 80 female and 0.20 male.0. 90 of the females went to college. 0.78 of the males went to college. A management trainee is selected at random. What is the probability that the person selected is a female who did NOT go to college? .

**Solution.** Denote by $F$ the event that selected at random person is female, and the same thing for $M$. The condition implies that $\mathsf{P}(F) = 1 - \mathsf{P}(M) = 0.8$.Denote by $A$ the event that person selected at random did not go to the college, hence $\mathsf{P}(A|F) = 0.1$ and $\mathsf{P}(A|M) = 0.12$ We are interested in the probability $\mathsf{P}(F \cap A) = \mathsf{P}(A|F)\mathsf{P}(F) = 0.1 \cdot 0.8 = 0.08$.

**Answer** 0.08.