Probability tree diagram:

Root node branches:
$P(\neg B) = \dfrac{3}{4}$ (left) and $P(B) = \dfrac{1}{4}$ (right)

From $\neg B$:
$P(\neg S \mid \neg B) = \dfrac{2}{3}$ leading to $\neg S$, and $P(S \mid \neg B) = \dfrac{1}{3}$ leading to S

From B:
$P(\neg S \mid B) = \dfrac{1}{5}$ leading to $\neg S$, and $P(S \mid B) = \dfrac{4}{5}$ leading to S

$$\frac{3}{4} \cdot \frac{2}{3} = \boxed{\frac{1}{2}} \qquad \frac{3}{4} \cdot \frac{1}{3} = \boxed{\frac{1}{4}} \qquad \frac{1}{4} \cdot \frac{1}{5} = \boxed{\frac{1}{20}} \qquad \frac{1}{4} \cdot \frac{4}{5} = \boxed{\frac{1}{5}}$$