\[ P(g) = \frac{1}{52} \] (One particular card out of 52 cards.)

\[ P(h) = \frac{4}{52} \] (Four queens in the deck.)

\[ P(i) = \frac{13}{52} \] (13 different cards of a given suit)

\[ P(h) \cdot P(i) = \frac{4}{52} \cdot \frac{13}{52} = \frac{1}{52} = P(g) \]