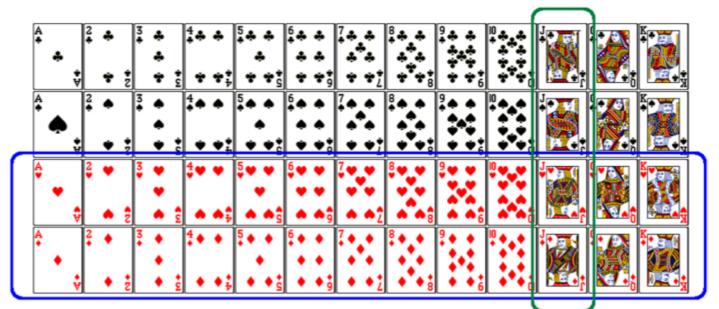
Union of non-disjoint events

What is the probability of drawing a jack or a red card from a well shuffled full deck?



$$P(jack \ or \ red) = P(jack) + P(red) - P(jack \ and \ red)$$

= $\frac{4}{52} + \frac{26}{52} - \frac{2}{52} = \frac{28}{52}$

Figure from http://www.milefoot.com/math/discrete/counting/cardfreq.htm