6. a) P(DIAMOND or KING)

$= \frac{13}{52} + \frac{4}{52} - \frac{1}{52} = \frac{16}{52} = 0.3077$

b) P(ACE or QUEEN)

$= \frac{4}{52} + \frac{4}{52} = \frac{8}{52} = .1538$

c) P(CLUBS or HEART)

$= \frac{13}{52} + \frac{13}{52} = 0.5$

d) P(RED or QUEEN)

$= \frac{26}{52} + \frac{4}{52} - \frac{2}{52} = \frac{28}{52} = .5385$

7. a) $P(F) = \frac{89}{115}$

b) $P(24\text{-}26) = \frac{30}{115}$

c) P(21-23 AND GOOGLE +) $= \frac{10}{115}$

d) P(18-20 or FACEBOOK)

$\frac{55}{115} + \frac{80}{115} - \frac{50}{115} = \frac{85}{115}$