7. **Solution: D**

Let

\( A = \) event that a policyholder has an auto policy  
\( H = \) event that a policyholder has a homeowners policy  

Then based on the information given,

\[
\Pr(A \cap H) = 0.15 \\
\Pr(A \cap H^c) = \Pr(A) - \Pr(A \cap H) = 0.65 - 0.15 = 0.50 \\
\Pr(A^c \cap H) = \Pr(H) - \Pr(A \cap H) = 0.50 - 0.15 = 0.35
\]

and the portion of policyholders that will renew at least one policy is given by

\[
0.4 \Pr(A \cap H^c) + 0.6 \Pr(A^c \cap H) + 0.8 \Pr(A \cap H) \\
= (0.4)(0.5) + (0.6)(0.35) + (0.8)(0.15) = 0.53 \quad (= 53\%)
\]

8. **Solution: D**

Let

\( C = \) event that a patient visits a chiropractor  
\( T = \) event that a patient visits a physical therapist  

We are given that

\[
\Pr(C) = \Pr(T) + 0.14 \\
\Pr(C \cap T) = 0.22 \\
\Pr(C^c \cap T^c) = 0.12
\]

Therefore,

\[
0.88 = 1 - \Pr(C^c \cap T^c) = \Pr(C \cup T) = \Pr(C) + \Pr(T) - \Pr(C \cap T) \\
= \Pr(T) + 0.14 + \Pr(T) - 0.22 \\
= 2\Pr(T) - 0.08
\]

or

\[
\Pr(T) = (0.88 + 0.08)/2 = 0.48
\]