

10.4 pg. 710 # 3, 7, 9, 13, 15, 19-37 odd, 43, 45, 49

3.) 0.4

7.)  $\frac{7}{12}$

9.)  $0.5 + 0.35 - 0.2 = 0.65$

13.)  $\frac{5}{7}$

15.) B

19.)  $\frac{3}{8}$

21.)  $\frac{4}{52} + \frac{13}{52} - \frac{1}{52} = \frac{16}{52} = \frac{4}{13}$

23.)  $\frac{4}{52} + \frac{4}{52} = \frac{8}{52} = \frac{2}{13}$

25.)  $1 - \frac{13}{52} = \frac{39}{52} = \frac{3}{4}$

27.) You should subtract instead of add.  $P(\text{club}) + P(9) - P(\text{club} \cap 9)$   
 $= \frac{13}{52} + \frac{4}{52} - \frac{1}{52} = \frac{16}{52}$  OR  $\frac{4}{13}$

29.)  $0.6 + 0.32 - 0.25 = 0.67$ ; not disjoint

31.)  $\frac{8}{15} + B - \frac{2}{15} = \frac{3}{5}$   
 $P(B) = \frac{1}{5}$ ; not disjoint

33.)  $16 + B - 8 = 32$   
 $P(B) = 24$ ; disjoint

35.)  $\frac{5}{36}$

37.)  $\frac{30}{36} = \frac{5}{6}$

43.)  $12 + 15 - 6 = \frac{21}{30} = \frac{7}{10}$

45.)  $P(\text{at least 2 same}) = 1 - P(\text{none same})$   
 $1 - \frac{10 \cdot 9 \cdot 8 \cdot 7 \cdot 6 \cdot 5}{10^6} \approx 0.8488$

49.)  $P(F \text{ OR } Y) = P(F) + P(Y) - P(F \cap Y)$   
 $\frac{9}{20} + \frac{12}{20} - \frac{4}{20} = \frac{17}{20}$