4.1] (p161)

4.15 Bowl with 12 poker chips – 3 red, 4 white, 5 blue

Select one at random.

$\frac{f}{N}$ – frequency of event / total # of options

a) Prob of selecting red.

$f = 3$ $\quad \frac{f}{N} = \frac{3}{12} = \frac{1}{4}$

$N = 12$

b) Prob of selecting red or white

$\frac{7}{12}$

c) not white

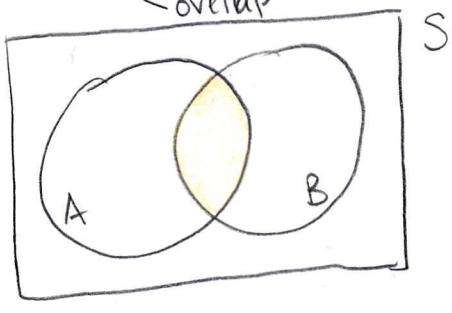
$\frac{8}{12} = \frac{2}{3} \approx 0.67$

4.2] p170

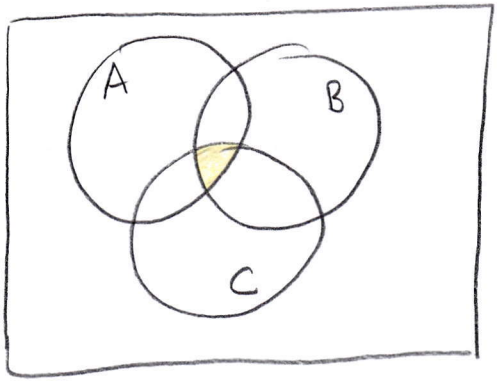
43-45

a) (A and B)

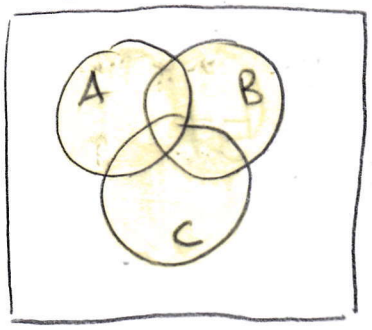
└ overlap



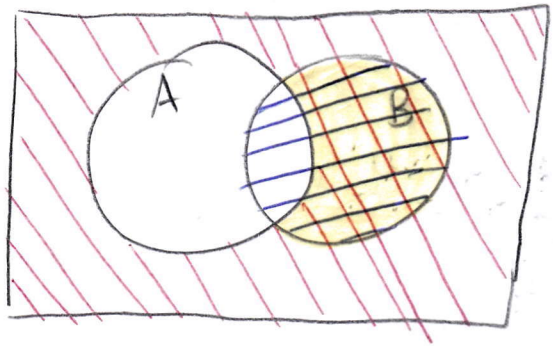
b) (A and B and C)



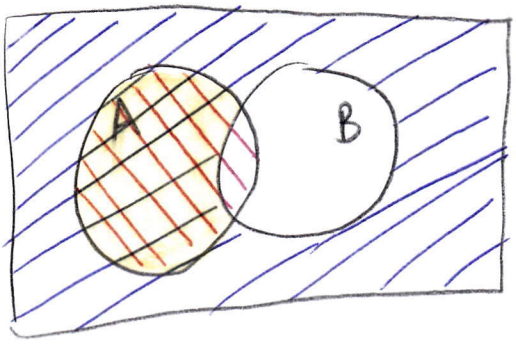
44) a) (A or B or C)



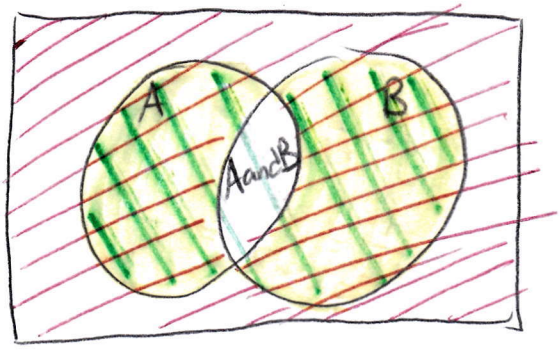
b) ((not A) and B)



45) a) (A and (not B))

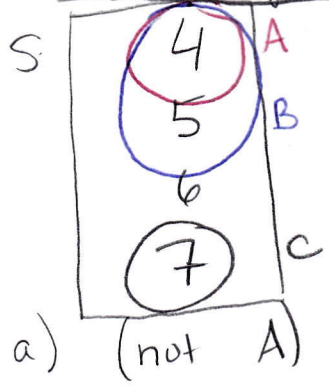


b) ((A or B) and (not (A and B)))



63)

Games Required	Frequency
4	21
5	24
6	24
7	36



A = event WS decided in 4 games

B = event WS decided in <6 games

C = event WS decided in 7 games

a) (not A)

WS decided in 5, 6, or 7 games. 24+24+36 = 84

b) (A and B)

WS decided in 4 games 21

c) (A or C)

WS decided in 4 or 7 games 21+36 = 57

d) (A and C)

Impossible event! 0