

HW S. 2 Part A pages 39, 41, 43, 45, 47 pg 309-310

(39) a)

1,1	2,1	3,1	4,1
1,2	2,2	3,2	4,2
1,3	2,3	3,3	4,3
1,4	2,4	3,4	4,4

16 outcomes

b) Each outcome has probability $\frac{1}{16}$

(41) $P(\text{sum of 5}) = \frac{4}{16} = \frac{1}{4}$

(43) a) Legit. make

b) Not Legit; $.56 + .44 + .24 + .17 = 1.41$ prob sum is $>$ than 1

c) Legit (even though deck of cards is jacked up)

(45) a) $P(C) + P(A) + P(B) = .49 + .27 + .20 = .96$

$P(\text{Type AB}) = 1 - .96 = .04$

b) $P(\text{NOT AB}) = .96$

c) $P(C \text{ or } B) = .49 + .20 = .69$

(47) $P(\text{not complete h.s.}) = .13$

$P(\text{has h.s. diploma but no further education}) = .29$

$P(\text{has at least B.A.}) = .30$

a) $.13 + .29 + .30 = .72$

so Prob (some education beyond H.S. no BA) = $1 - .72 = .28$

b) Prob (at least H.S.) = $1 - \text{Prob(not finished)}$
 $= 1 - .13 = \boxed{.87}$