2.1 # 3, 4, 7, 8, 9, 12, 14, 16

HW #4 2.2 # 2, 3, 4, 5, 6, 7, 8, 9, 11, 12

3) FFFF FTFF TTTT
a) FFFT FTTT TTFF
FFTF FTTF TTFT
FFTT FTFT TTTF

b) $2/16 = 1/8$

c) $4/16 = 1/4$

d) $5/16$

4) RRR YRR GGG

a) RRY GRR YRY
RRG GRY YRG
RYR GRG YYR
RYY GYR YYY
RYG GYY YYG
RGR GYG YGR
RGY GGR YGY
RGG GGY YGG

b) RRR
YYY
GGG

c) B = RYG

RGY
YRG
GRG
GYG
GGR

d) C = RGG

YGG
GRG
GYG
GGR
GGY
GGG

e) GGG

f) RRR
YYY
GGG
RYG
RYG
YGR
GRY
GYR

g) RRR
YYY

h) RGG
YGG
GRG
GYG

i)

j) RYG
YGR
GRY
GYR

F) NO, GGG in common

GGR
GGY

J) Yes NO common

7) a) $0.26+0.22 = 0.48$ b) $1-0.37 = 0.63$

8) a) $70/100 = 0.7$ b) $10/100 = 0.1$ $1-0.1 = 0.9$

9) a) $80/100 = 0.8$ $1-0.8 = 0.2$ b) $5/100 = 0.05$ $1-0.05 = 0.95$

12) a) $0.15+.05-.17 = .03$ b) $1-0.17 = .83$ c) $.15-.03 = 0.12$

14) a) $1000-948/1000 = 0.052$ b) $37/1000 = .037$ $+43/1000$ $+0.43$ -0.052 $= 0.028$

c) $0.037-0.028 = .009$

16) $P(A \cap B) = .95+.90-0.88 = 0.97$

2) $\frac{2 \cdot 2}{5(2)(4)} = 40$ 3) $\frac{8!}{4!4!} = 70$

4) $10!/5!1! = 252$ 5) a) $\frac{8!}{(8-3)!} = \frac{8!}{5!} = 336$

6) $\frac{8!}{(8-3)!} = 8(7)(6) = 336$ b) $\frac{8!}{3!5!} = 56$

7) $4 \times 4 \times 4 \times 4 \times 4 = 1024 \times 1024$
$= 1,048,576$

8) a) $26 \times 26 \times 26 \times 10 \times 10 \times 10 = 17,576,000$

b) $\frac{26!}{26-3!} = \frac{26!}{23!} \frac{10!}{7!} = 11,232,000$

c) $\frac{11,232,000}{17,576,000} = 0.6391$

9) a) $36^8 = 2,821,109,907,456$

b) $26^8 = 208,827,064,576$

$2,612,282,842,880$ → Divided

c) 0.9260

11) $8+6=14$ $4+2=6$ $14(6)=84$

$8(4)=32$ $6(2)=12$ $32+12=44$ $44/84$

$= 0.5238$

12) $\frac{12!}{2!10!} = 66$ $\frac{6}{2!4!} = 15$ $\frac{4!}{2!} = 6$ $22/66$

$= 0.333\overline{3}$