

2 a) $\{ (6,3), (4,5), (5,4), (3,6) \}$

b) $\frac{4}{36} = \frac{1}{9}$

3 a) $\{ (3,1), (1,3), (4,2), (2,4), (6,4), (4,6), (3,5), (5,3) \}$

b) $\frac{8}{36} = \frac{2}{9}$

4 a) All 36 outcomes in sample space

b) 1

5 a) \emptyset

b) 0

6 a) $\{ \text{egg breaks, egg doesn't break} \}$

b) NO. Expect egg to break almost every time.

7 a) $\{ HT, TH, TT \}$

b) $\frac{3}{4}$

8 a) $\frac{g}{w+b+g}$

b) $\frac{b}{w+b+g}$

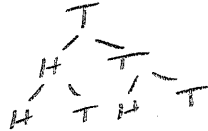
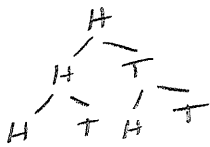
c) $\frac{b+g}{w+b+g}$

9 a)
 $\begin{matrix} \boxed{BBBB} \\ \boxed{BBBG} \\ \boxed{BBGB} \\ \boxed{BBGG} \\ \boxed{BGBB} \\ \boxed{BGBG} \\ \boxed{BGGB} \\ \boxed{BGGG} \end{matrix}$

$\begin{matrix} \boxed{GGGG} \\ \boxed{GGGB} \\ \boxed{GGGB} \\ \boxed{GGBB} \\ \boxed{GGGB} \\ \boxed{GGGB} \\ \boxed{GGGB} \\ \boxed{GGGG} \end{matrix}$

b) $\frac{4}{16} = \frac{1}{4}$

10



= 8 OUTCOMES

- a) 0 HEADS: TTT
 1 HEAD: HTT, TTH, THT
 2 HEADS: HHT, HTH, THH
 3 HEADS: HHH

- b) 0: 1/8
 1: 3/8
 2: 3/8
 3: 1/8

11 a)

n	P(n)
1	1/2
2	1/4
3	1/8
4	1/16

b) $n=5 \Rightarrow$ ALL HEADS
 $\frac{1}{2 \cdot 2 \cdot 2 \cdot 2 \cdot 2} = \frac{1}{32}$

12) $P(A) = 0.9$
 $460(0.9)$
414