

23 (vi) outcomes  $(4,3), (4,3), (5,2), (5,2), (6,1), (6,1)$   
 $P(\text{sum } 7) = \frac{6}{36} = \frac{1}{6}$

(vii) outcomes  $(5,3), (5,3), (6,2), (6,2)$   
 $P(\text{sum } 8) = \frac{4}{36} = \frac{1}{9}$

(viii) outcomes  $(6,3), (6,3)$   
 $P(\text{sum } 9) = \frac{2}{36} = \frac{1}{18}$

24 outcomes  $= 2^2$   
 $= 4$

HH  
 HT ✓  
 TH ✓  
 TT ✓

$P(\text{at most 1 head}) = \frac{3}{4}$

25 outcomes  $= 2^3$   
 $= 8$

HHH ✓	THH ✓
HHT ✓	THT
HTH ✓	TTH
HTT	TTT

$P(\text{all heads}) = \frac{1}{8}$

$P(\text{at least 2 heads}) = \frac{4}{8} = \frac{1}{2}$

