

Probability 28 Quiz

- 1) You have a standard shuffled deck of cards. Pick one card. Find the probabilities.
 - a) $P(\text{red king})$
 - b) $P(\text{a card with a value of less than 8})$ (ace = 1)
- 2) A school has 742 students. In a random sample of 35 students, it is found that 5 wear glasses.
 - a) What is the probability of wearing glasses at the school?
 - b) How many students at the school are likely to wear glasses?
- 3) A pair of die are rolled. Find the probabilities.
 - a) the sum is less than six
 - b) at least one three is rolled
 - c) a three is not rolled
- 4) Three die are rolled. Find the probabilities.
 - a) three ones
 - b) the sum equals four
- 5) A die is rolled and a card is drawn from a standard shuffled deck. Find the probabilities.
 - a) rolling a two and drawing a jack
 - b) rolling an even number and drawing a red card
- 6) Pick one card from a standard deck. What is the probability of drawing a red face card or a spade?

7) The chance of winning a game is 0.68. Three games are played. Find the probabilities. (hint: use a tree diagram)

a) three wins

b) one win and two losses

8) A bag contains three black marbles and two white marbles. One marble is picked and then replaced. Another marble is picked. Find the probabilities.

a) $P(BB)$

b) $P(WW)$

c) $P(BW \text{ or } WB)$

Answers: 1)a) $1/26$, b) $7/13$, 2)a) $1/7$, b) 106 , 3)a) $5/18$, b) $11/36$,
c) $25/36$, 4)a) $1/216$, b) $3/216 = 1/72$ (211, 121, 112), 5)a)
 $1/6 \times 4/52 = 1/78$, b) $1/2 \times 1/2 = 1/4$, 6) $6/52 + 13/52 = 19/52$, 7)a)
 0.31 , b) 0.21 , 8)a) $9/25$, b) $4/25$, c) $12/25$.