

Solve the problems below using your knowledge of probability. Write fractions in lowest terms.

1. What is the probability of choosing an ace from a standard deck of playing cards?  $\frac{4}{52} = \frac{1}{13}$
  
2. What is the probability of choosing a red marble from a jar containing 5 red, 6 green and 4 blue marbles?  $\frac{1}{3}$
  
3. What is the probability of choosing a marble that is not green in problem 2?  $\frac{3}{5}$
  
4. What is the probability of getting an even number when rolling a single 6-sided die?  $\frac{1}{2}$
  
5. What is the probability of choosing a queen or a king from a standard deck of 52 playing cards?  $\frac{2}{13}$
  
6. What is the probability of landing on an odd number after spinning a spinner with 9 equal sectors numbered 1 through 9?  $\frac{5}{9}$
  
7. What is the probability of getting a 0 after rolling a single die numbered 1 to 6?  $\frac{0}{6} = 0$
  
8. What is the probability of choosing a picture card (jack, queen or king) from a standard deck of playing cards?  $\frac{3}{13}$
  
9. What is the probability of choosing the letter a from the word mathematics?  $\frac{2}{11}$
  
10. What is the sample space for choosing a letter from the word mathematics?  $\{m, a, t, h, e, i, c, s\}$