1. You have 9 different movies on your Netflix queue. In how many different ways can you order them?

   362,880

2. You get a groupon that allows you to get (and keep) 4 of the 9 movies on your Netflix queue. In how many ways can you choose your four movies?

   126

3. In the U-Can-Win lottery, two balls are selected at random (without replacement) from 12 balls numbered 1 to 12. Your best friend was born on April 3 so you bet a 4 and a 3. What is the probability you will win?

   .015

4. I have three daughters and each has one brother. How many children do I have? (no step or half children)

   4

5. I have a bag with 10 red, 20 green, and 5 yellow marbles. I reach in and grab two (without replacement).
   What is the probability that I get two green?

   0.319

6. I have a bag with 10 red, 20 green, and 5 yellow marbles. I reach in and grab two (with replacement).
   What is the probability that I get two green?

   0.3265

7. I have a bag with 10 red, 20 green, and 5 yellow marbles. I reach in and grab two (with replacement).
   What is the probability that I get a red or yellow?

   0.6735

8. I have raised $140 for my charity. That is 40% of my goal. How much money do I hope to raise?

   $350

9. How many ways are there to deal a three card hand from a standard 52-card deck?

   22,100

10. You are dealt a three card hand from a standard 52 card deck. What is the probability you got three 5's?

    4/22,100 or 0.00018

11. A penny, dime, and nickel are tossed. You are told the penny came up heads. What is the probability all three are heads?

    ¼ or 0.25

12. I have 4 shirts, 5 pairs of pants, and 12 pairs of shoes. How many different outfits are possible?

    240

13. An elevator containing 5 people can stop at any of seven floors. What is the probability that at least 2 people get off on the same floor?

    0.85

14. Wiley says that you scored 56% which is 2.8/5 on your homework assignment. However, you turned it in past the due date, and so your score was reduced by 30%. How many questions did you actually get right?

    4

15. Nick's bank account had $240 in it on Monday. On Tuesday, Nick spent $60 of this money on a video game. By what percentage did his bank account decrease?

    25%

16. Joe owns an antique store. He bought a one of a kind vase at an auction for $40. He put the vase up for sale for $70 and it was purchased by someone who paid with a $100 traveler's check so Joe gave the customer $30 in change. However when Joe went to the bank to cash the traveler's check the bank teller told him that it wasn't for $100 but for 100 rubles (Russian money) and was only worth $3.15. How much money did Joe end up making or losing on the whole vase deal?

    He lost $66.85

17. Three fair coins are tossed behind a curtain. You are told that there is at least one head showing. What is the probability that three heads were tossed?

    1/7 or 0.1429

18. There are 8 people in a race. How many ways can first, second, and third place be awarded?

    336

19. Five shoppers buy an apple at the fruit stand. One in 10 apples at this fruit stand has a worm in the middle. You stop the shoppers as they leave and have them cut the apple in half to make sure there is no worm in it before they eat it. After cutting 5 apples, what is the probability that you have found one or more apples with a worm in the middle?

    0.67232

20. The probability that I will get an A on my math test is 0.6. What is the probability I will not get an A?

    0.4

21. The probability that I will get an A on my math test is 0.75. The probability that I will get an A on my english test is 0.6.

    What is the probability I will get an A on both tests?

    0.45

22. The probability that I will get an A on my math test is 0.75. The probability that I will get an A on my english test is 0.6.

    What is the probability I get an A on at least one of the tests?

    0.55

23. There were 5 fine ladies from Carruther

    Who named their pets after each other.
    From the following clues,
    Can you carefully choose
    The pet which belongs to Sue's mother?
    Toni Taylor owns a hog;
    Belle Bradkowski owns a frog;
    Janet Jackson owns a crow;
    The garter snake is owned by Jo;
    Sue's the name they call the frog;
    And "Here Jo, here Jo" brings the hog;
    The name by which they call the pony
          Is the name of the woman whose pet is Toni;
    The final clue, which I'll now tell,
    Is that Sue's mother's pet is Belle.

    Answer:
    Sue's mother's pet is a snake
    (see next page for more detail)

Name	Pet	Pet's name
Toni	hog	Jo
Belle	frog	Sue
Janet	crow	Toni
Jo	snake	Belle
Sue	pony	Janet

Note: The pony belongs to Sue and its name is the name of the person whose pet is Toni, by process of elimination, Janet or Jo has a pet named Toni, but if Jo's pet were Toni, then Sue's pet would be Jo and then Janet's pet would be Janet which doesn't work so Janet's pet must by Toni and so Sue's pet is Janet and Jo's is left to be Belle.