



























14. Sophie is shown a selection of ski-holiday brochures. There are three for Italy, two for Austria and five for Switzerland.

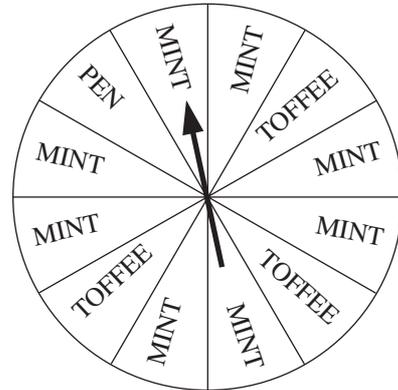
Sophie takes one of these brochures at random.

- (a) What is the probability that it is for Italy?  
 (b) What is the probability that it is **not** for Austria?

15. To play a game you spin the pointer.  
 You win the prize on which the pointer stops.

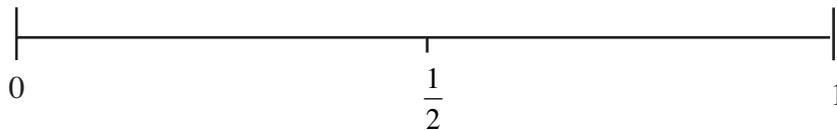
Ryan has one spin.

- (a) Which prize is Ryan most likely to win?  
 (b) Explain your answer to part (a)



Donna has one spin.

- (c) Make a copy of the line shown below and mark with a P the probability that Donna will win a pen.  
 (d) On the line mark with a W the probability that Donna will win a watch.



## Challenge!

*Anthony, Patrick and Millie repeatedly take turns tossing a die. Anthony begins; Patrick always follows Anthony; Millie always follows Patrick; Anthony always follows Millie. What is the probability that Millie will be the first one to toss a six?*



## Investigations

- How many students must you gather together so as to ensure that at least two of the students have birthdays falling in the same month?*
- A secondary school has an enrolment of 1100. Is it possible that there will be four students in the school whose birthdays fall on the same day of the year? Explain your answers.*