Write down pairs of fractions that total 1.

$\frac{2}{3} + \frac{1}{3}$

$\frac{6}{12} + \frac{6}{12}$

$\frac{7}{14} + \frac{7}{14}$

$\frac{9}{10} + \frac{1}{10}$

$\frac{3}{4} + \frac{1}{4}$

$\frac{21}{42} + \frac{21}{42}$

$\frac{15}{20} + \frac{5}{20}$

$\frac{19}{20} + \frac{1}{20}$

$\frac{18}{20} + \frac{2}{20}$

$\frac{11}{20} + \frac{9}{20}$

Heads I win, tails you lose

Probability

The chances are..you'll be good at this.

Impossible

Tomorrow I will be 6ft tall

unlikely

throwing a dice and getting a 1

equally likely

throwing a coin and getting a head

likely

If you ask someone at random, they will have a tv

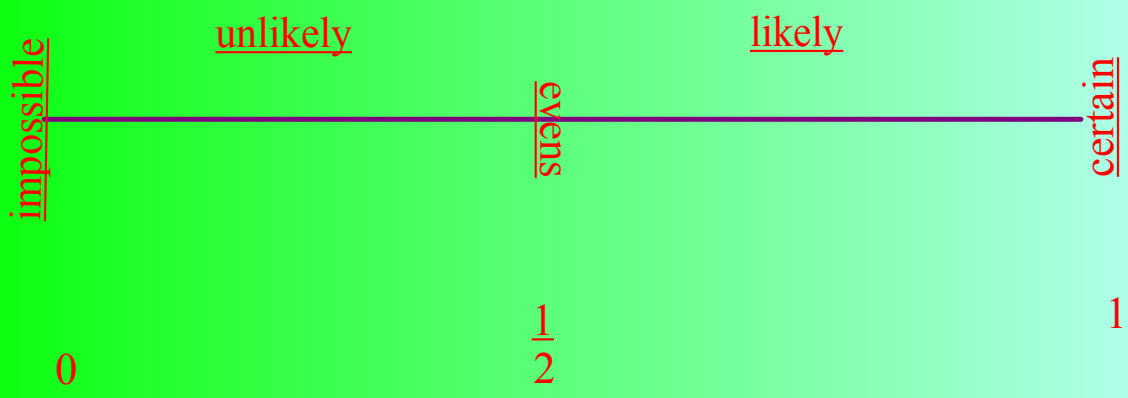
Certain

A year 8 maths text book will have numbers in it.

There are adults and children in this school, so the chances of an adult walking through the door is 1/2.
True or false?

Can you think of some events that have an evens chance of occuring?

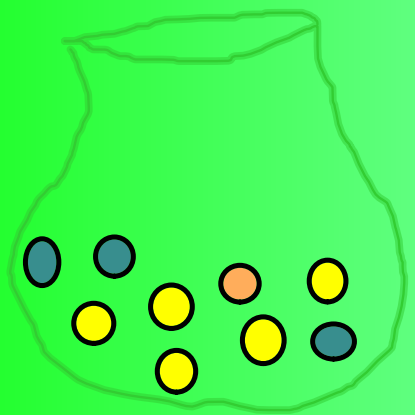
The Probability Scale: Using words and fractions

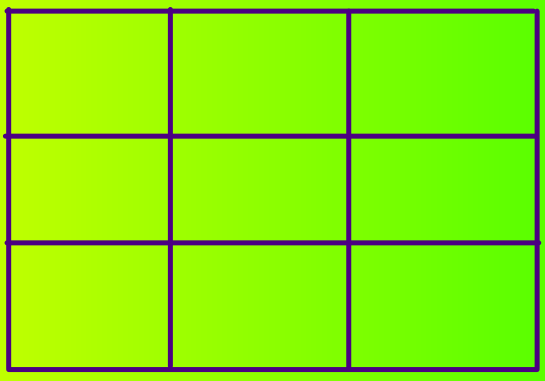


page 164 qu 1 and 2

What are the chances....?
What is the probability....?

p(not getting a 6)=
p(getting a 6)=





Two dice bingo

A sample-space diagram to show the outcomes for rolling two dice.

+	1	2	3	4	5	6
1	2	3	4			
2	3					
3						
4						
5						
6						

p(0)= 0

p(1)= 0

p(2)= $\frac{1}{36}$

p(3)= $\frac{2}{36}$

p(4)= $\frac{3}{36}$

p(5)= $\frac{4}{36}$

p(6)= $\frac{5}{36}$

p(7)= $\frac{6}{36}$

p(8)= $\frac{5}{36}$

p(9)= $\frac{4}{36}$

p(10)= $\frac{3}{36}$

p(11)= $\frac{2}{36}$

p(12)= $\frac{1}{36}$

p(13)= 0

Extension: Find

1) p(even no.)= $\frac{18}{36}$

2) p(prime no.)=

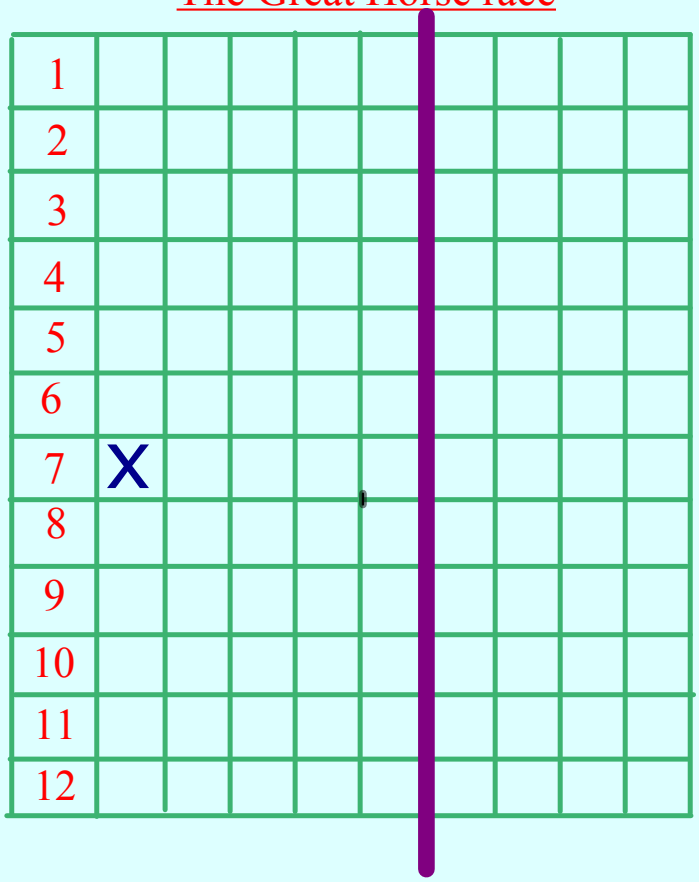
3) p(square no)=

4) p (not a 5) =

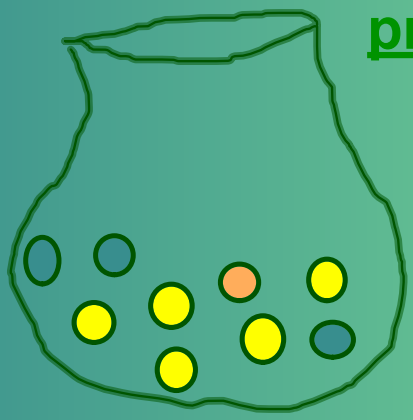
5) p (not a 7)=

page 175

The Great Horse race



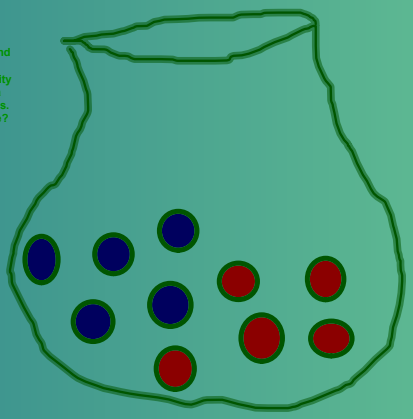
Using fractions to calculate probability



$p(y) = \frac{5}{9}$ $p(b) = \frac{3}{9}$

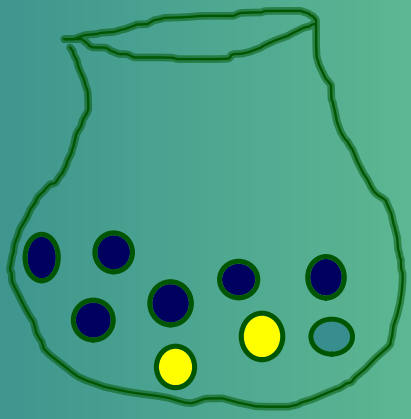
$p(o) = \frac{1}{9}$ $p(b) = 0$

If I add an extra blue and an extra red the probability of drawing a blue changes. True or false?



$p(r) = \frac{1}{2} = \frac{5}{10}$

$p(o) = 0$

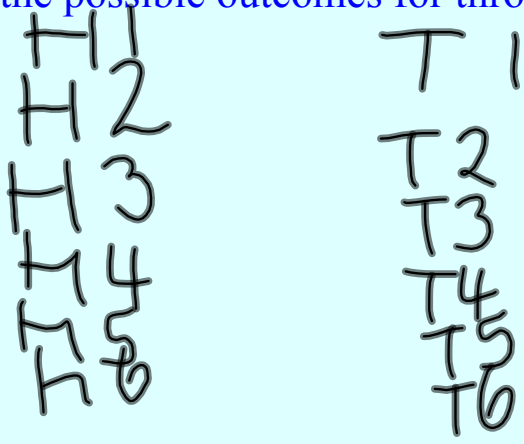


page 165

Listing Outcomes

Sometimes the easiest way to show outcomes is simply to list the possibilities.
The main weakness of this strategy is that is easy to forget something.
Work systematically and you will be fine!

List the possible outcomes for throwing a dice and a coin.



page 173

Menu

Starters:

Melon

Green salad

Main Course:

Roast beef

Macaroni cheese

Pizza

What are the different combinations you could eat?

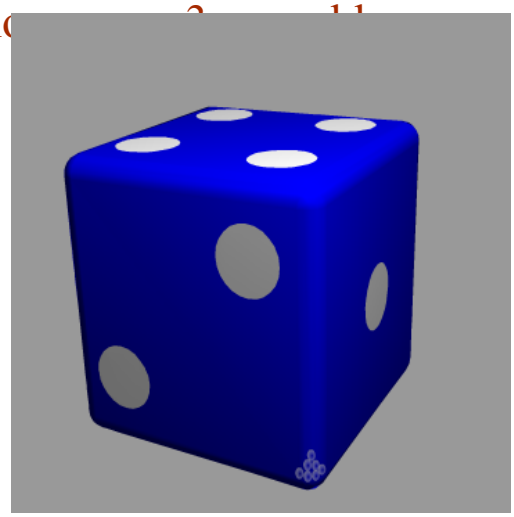
M
M
M

RB
MC
P

GS

Expected Outcomes

I throw a dice 12 times: ho
expect?



Is this certain?

The times you throw the dice
↑
the more likely you are to get
the same frequency for each number.

Attachments

fair or unfair.ppt.ppt

Fair or unfair.pptx