

Here are 5 Christmas problems to solve!

1

Costing the Christmas Shopping

Nyera is shopping for Christmas dinner for the eight members of her family. She buys:

2 turkeys costing £15 each.

5 sacks of potatoes which cost  
£1.40 each

3 packs of Brussels sprouts at £1.

How much does Christmas dinner cost per person?



2

Number of Presents

Keith has some presents under the tree.

Erica has 3 fewer presents than Keith.

Dan has twice as many as Erica.

There are 11 presents under the tree.

Keith suggests giving some of his presents to Erica so they can all have the same number of presents.

Is this possible?

# 3

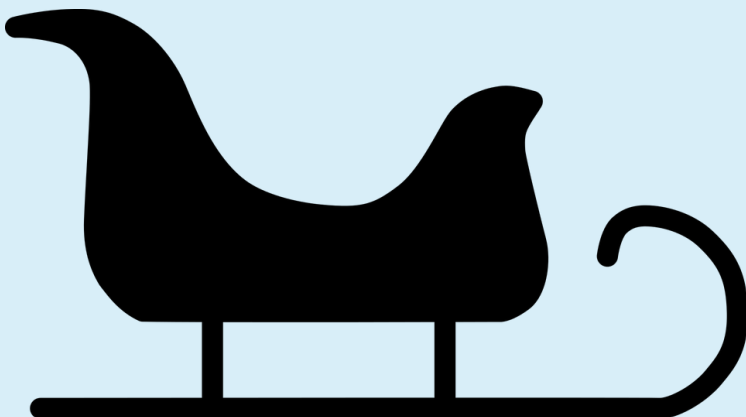
## Christmas Game Probabilities

The Coopers are playing a card game on Christmas day. The game uses a pack of 60 cards. The ratio of black cards to red cards is 1: 1.

Kathryn has been given 6 black cards in her hand.

Find the ratio of the number of red cards left in the pack to the number of black cards left in the pack.

Give your answer in the simplest form.



# 4

## Who chooses a Bounty?

There are only 4 types of chocolate left in the tin. The table shows the probabilities of picking a random Malteser and picking a random Galaxy.

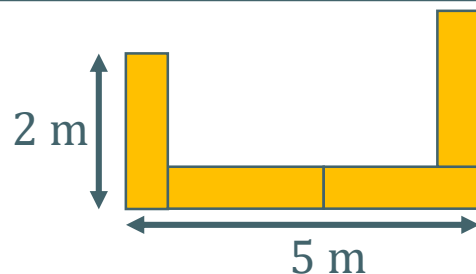
	Prob		Prob
Malteser	0.16	Milky Way	0.44
Galaxy	?	Bounty	?

- Find the probability of randomly picking a Galaxy or a Bounty.
- The probability of picking a Galaxy is the same as the probability of picking a Bounty. Complete the table.

# 5

## Santa's Sack

Santa arranges 4 identical presents in his sleigh as in the diagram below.



Find the total area of this cross section of the presents.