

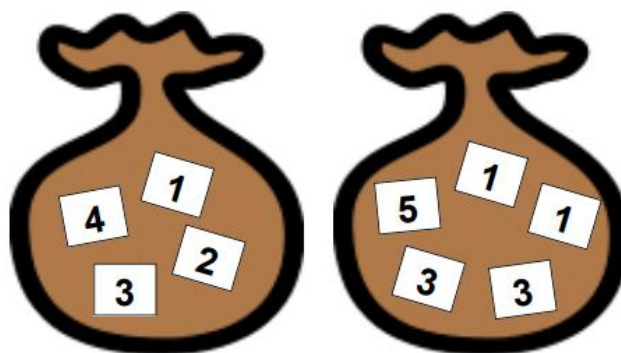
## Listing Outcomes

1. Jemma shakes the two bags shown below and picks a numbered card from each.

She multiplies the numbers on her cards together.

a) Complete the sample space diagram to show the different scores she could make:

	1	1	3	3	5
1					
2					
3					
4					



b) What is the probability that Jemma gets a score of 9?



2. Peter is choosing his dinner from the menu.

There are 12 different ways he could choose his meal, if he has a starter, main meal and desert. List them all.

He tells the chef to choose a meal for him at random. What is the probability that:

- He gets soup for starter and ice cream for desert?
- He gets beef for his main course and apple tart for desert?

3. Carl rolls two dice. He subtracts the numbers on the dice to get a score. For example, if he rolls a 2 and then a 6, he scores 4. What is the probability that Carl scores:

- 0?
- 7?

4. Andrew picks a card from a normal pack of playing cards. He records whether he gets a heart, club, diamond or spade. At the same time, he throws a normal six sided die and records the number it lands on.

If he gets a heart and rolls a 6, he wins a prize.

- What is the chance he wins?
- What is the chance he loses?



## Answer Key

1.

a)

	1	1	3	3	5
1	<b>1</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>5</b>
2	<b>2</b>	<b>2</b>	<b>6</b>	<b>6</b>	<b>10</b>
3	<b>3</b>	<b>3</b>	<b>9</b>	<b>9</b>	<b>15</b>
4	<b>4</b>	<b>4</b>	<b>12</b>	<b>12</b>	<b>20</b>

b)

**2/20 or 1/10**

2.

Soup

Chicken Curry

Ice Cream

Soup

Chicken Curry

Apple Tart

Soup

Vegetable tart

Ice Cream

Soup

Vegetable tart

Apple Tart

Soup

Beef Roast

Ice Cream

Soup

Beef Roast

Apple Tart

Fruit Salad

Chicken Curry

Ice Cream

Fruit Salad

Chicken Curry

Apple Tart

Fruit Salad

Vegetable tart

Ice Cream

Fruit Salad

Vegetable tart

Apple Tart

Fruit Salad

Beef Roast

Ice Cream

Fruit Salad

Beef Roast

Apple Tart

a) **1/4**

b) **1/6**

3.

a) **1/6**

b) **0**

4.

a) **1/24**

b) **23/24**