




## MNU 4-22a

## Homework 3

## Bronze Level







### Outcome 1 - Estimating Probability

Draw a probability line for each of these sets of events...

- 1 (a) Selecting the letter C from the word CORRECTING.  
(b) Toss a coin and it will land on 'tails'.  
(c) Choosing an even number from 1, 2, 2, 3, 4, 5, 7, 8, 9, 11. 
- 2 (a) An animal picked from 8 cats and 2 dogs will be a dog.  
(b) Selecting the letter S from the word PESSIMISTS.  
(c) Picking a black card from a pack of playing cards. 
- 3 (a) Selecting an odd number from 2, 3, 4, 5, 6, 7, 8, 8, 10, 11.  
(b) Picking the 1 bad pear from a bag of 10 pears. 
- 4 (a) Selecting the letter N from the word RECOUNTING.  
(b) Picking an apple from a bowl with 6 apples, 3 pears and a banana.  
(c) Picking a black pen from a box with 7 red and 3 black.

### Outcome 2 - Calculating Simple Probability

Write down the probability of each event happening...

- 1 Rolling a dice and getting a score less than 4. 
- 2 Picking an odd number from the list :- 1, 3, 4, 6, 8, 9, 10, 12, 14, 15.
- 3 Selecting the letter P from the word POWERPOINT.
- 4 Picking an even number from the list :- 2, 3, 5, 7, 8, 11, 13, 15.
- 5 Scoring more than 8 on a dartboard numbered 1-20. 
- 6 Winning a raffle when buying 14 out of the 150 tickets sold.
- 7 Choosing a six from a pack of playing cards. 
- 8 Choosing a red pencil from a box containing a 6 red, 8 blue and 2 green pencils. 
- 9 Choosing a boy at random from 6 boys and 12 girls. 
- 10 From a bowl containing 4 apples, 10 oranges, 2 pears and 6 oranges, selecting an orange. 

### Outcome 3 - Choosing at Random

A bag contains a green counter, 3 red counters, 2 yellow counters and 6 blue counters. A counter is chosen at random. What is the probability of **NOT** choosing...

- |                     |                   |
|---------------------|-------------------|
| 1 a green counter?  | 2 a red counter?  |
| 3 a yellow counter? | 4 a blue counter? |
| 5 a purple counter? |                   |

A bag contains a purple token, 2 red tokens, 6 blue tokens and 9 green tokens. A token is chosen at random. What is the probability of **NOT** choosing...

- |                    |                  |
|--------------------|------------------|
| 6 a purple token?  | 7 a red token?   |
| 8 a blue token?    | 9 a green token? |
| 10 a yellow token? |                  |