COSMOS
COACHING CENTRE

Worksheet 2 -
PROBABILITY AND VENN DIAGRAMS
- Complements
- Probability of complements

1. A normal die is thrown. Complete the following to find the complement of each event given.

a Throwing a 6

S = {_____}. Let A be the event 'throwing a 6'; then A = {_____}.

The complement of A is the set of outcomes that are in S but are not in A.

Complement of A = {_____}

The complement of A is the event '_____' or '_____' or '_____'.

b Throwing a 5 or 6

S = {_____}. Let B be the event 'throwing a 5 or 6'; then B = {_____}.

The complement of B is the set of outcomes that are in S but are not in B.

Complement of B = {_____}

The complement of B is the event '_____' or '_____' or '_____'.

c Throwing an odd number

S = {_____}. Let C be the event 'throwing an odd number'; then C = {_____}.

The complement of C is the set of outcomes that are in S but are not in C.

Complement of C = {_____}

The complement of C is the event '_____' or '_____' or '_____'.

2. A coin is tossed. What is the complement of the event 'getting a head'?

3. On a European roulette wheel, the probability that the ball will stop on a red number is $\frac{18}{37}$. What is the probability that it will *not* stop on a red number?

4. There are 1000 tickets sold in a raffle. If Angela buys 1 ticket, what is the probability that:

a she will win the raffle?

b she will not win the raffle?