**Mutually Exclusive and Exhaustive Events GREEN**

1) Here are the probabilities of some events () happening, write down the probabilities of the events not happening ():

a) \_\_\_\_\_ e) \_\_\_\_\_

b) \_\_\_\_\_ f) \_\_\_\_\_

c) \_\_\_\_\_ g) \_\_\_\_\_

d) \_\_\_\_\_ h) \_\_\_\_\_

2) There are some blue, red, green and purple balls in a bag. Find the probability of a purple ball being pulled out if these are the probabilities of the other colours:

a)

|  |  |  |  |
| --- | --- | --- | --- |
| Blue | Red | Green | Purple |
|  |  |  |  |

b)

|  |  |  |  |
| --- | --- | --- | --- |
| Blue | Red | Green | Purple |
|  |  |  |  |

 c)

|  |  |  |  |
| --- | --- | --- | --- |
| Blue | Red | Green | Purple |
|  |  |  |  |

3) A spinner consists of an outer ring of coloured sectors and an inner circle of numbered sectors, as shown.

a) The probability of getting is . The probability of getting or 3 are equal. What is the probability of getting ? \_\_\_\_\_

b) The probability of getting blue is . The probability of getting orange . The probability of getting green is . What is the probability of getting pink? (pink) \_\_\_\_\_

c) Which of these pairs of events are mutually exclusive?

i. Getting 3 AND getting 2 \_\_\_\_\_

ii. Getting 3 AND getting green \_\_\_\_\_

iii. Getting 3 AND getting blue \_\_\_\_\_

iv. Getting blue AND getting pink \_\_\_\_\_

**Mutually Exclusive and Exhaustive Events AMBER**

1) Here are the probabilities of some events () happening, write down the probabilities of the events not happening ():

Subtract from 1!

a) \_\_\_\_\_ e) \_\_\_\_\_

b) \_\_\_\_\_ f) \_\_\_\_\_

c) \_\_\_\_\_ g) \_\_\_\_\_

d) \_\_\_\_\_ h) \_\_\_\_\_

2) There are some blue, red, green and purple balls in a bag. Find the probability of a purple ball being pulled out if these are the probabilities of the other colours:

Subtract from 1!

a)

|  |  |  |  |
| --- | --- | --- | --- |
| Blue | Red | Green | Purple |
|  |  |  |  |

b)

|  |  |  |  |
| --- | --- | --- | --- |
| Blue | Red | Green | Purple |
|  |  |  |  |

 c)

|  |  |  |  |
| --- | --- | --- | --- |
| Blue | Red | Green | Purple |
|  |  |  |  |

3) A spinner consists of an outer ring of coloured sectors and an inner circle of numbered sectors, as shown.

a) The probability of getting is . The probability of getting or 3 are equal. What is the probability of getting ? \_\_\_\_\_

b) The probability of getting blue is . The probability of getting orange . The probability of getting green is . What is the probability of getting pink? (pink) \_\_\_\_\_

c) Which of these pairs of events are mutually exclusive?

Can they both happen at the same time?

i. Getting 3 AND getting 2 \_\_\_\_\_

ii. Getting 3 AND getting green \_\_\_\_\_

iii. Getting 3 AND getting blue \_\_\_\_\_

iv. Getting blue AND getting pink \_\_\_\_\_

**Mutually Exclusive and Exhaustive Events RED**

1) Here are the probabilities of some events () happening, write down the probabilities of the events not happening ():

Subtract from 1!

a) \_\_\_\_\_ e) \_\_\_\_\_

b) \_\_\_\_\_ f) \_\_\_\_\_

c) \_\_\_\_\_ g) \_\_\_\_\_

d) \_\_\_\_\_ h) \_\_\_\_\_

2) There are some blue, red, green and purple balls in a bag. Find the probability of a purple ball being pulled out if these are the probabilities of the other colours:

Subtract from 1!

a)

|  |  |  |  |
| --- | --- | --- | --- |
| Blue | Red | Green | Purple |
|  |  |  |  |

b)

|  |  |  |  |
| --- | --- | --- | --- |
| Blue | Red | Green | Purple |
|  |  |  |  |

 c)

|  |  |  |  |
| --- | --- | --- | --- |
| Blue | Red | Green | Purple |
|  |  |  |  |

3) A spinner consists of an outer ring of coloured sectors and an inner circle of numbered sectors, as shown.

a) The probability of getting is . The probability of getting or 3 are equal. What is the probability of getting ? \_\_\_\_\_

b) The probability of getting blue is . The probability of getting orange . The probability of getting green is . What is the probability of getting pink? (pink) \_\_\_\_\_

c) Which of these pairs of events are mutually exclusive?

Can they both happen at the same time?

i. Getting 3 AND getting 2 \_\_\_\_\_

Use the picture of the spinner – can it point at both things at the same time?

ii. Getting 3 AND getting green \_\_\_\_\_

iii. Getting 3 AND getting blue \_\_\_\_\_

iv. Getting blue AND getting pink \_\_\_\_\_