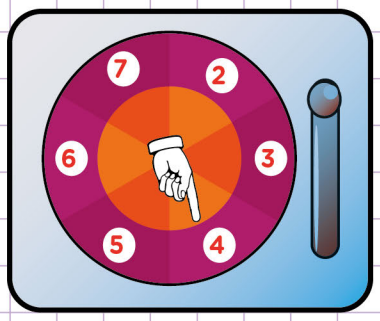
Name: ..... Class: .....

Probability of mutually exclusive events and overlapping events

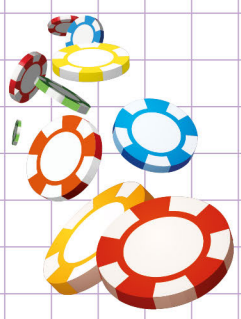
Multually exclusive events can never occur at the same time.

So, P(A or B) = P(A) + P(B)

1. You spin the spinner once.
What is p(even or grater than 4)? Leave your answer as a percentage.



2. You flip a coin.
What is p(heads or tail)? Leave your answer as a percentage.



Solution

mathskills4kids

Name: ..... Class: .....

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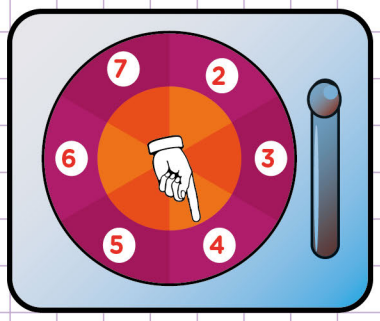


The events are mutually exclusive.

There are 3 even numbers; 2, 6, and 4

P(even) = $\frac{3}{6}$

Now, we also find P (greater than 4)

There are 3 numbers greater than 4; 5, 6, and 7

P (greater than 4) = $\frac{3}{6}$

Now, we also find P (even or greater than 4)

P (even or greater than 4) = P(even) + P(greater than 4)

$$\frac{3}{6} + \frac{3}{6} = \frac{6}{6} = 1$$

Multiply 1 by 100 to convert to percentage = 1 x 100 = 100%

2. You flip a coin.

What is p(heads or tail)? Leave your answer as a percentage.

Fliping a coin has 2 possibilities, **a head or a tail**

The events are mutually exclusive.

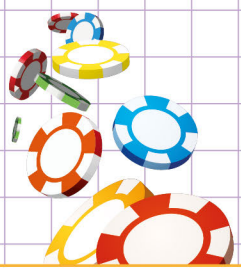
P(head) = $\frac{1}{2}$

Now, we also find P (tails)

P (tail) = $\frac{1}{2}$

P (head or tail) = P(head) + P(tail)

$$\frac{1}{2} + \frac{1}{2} = \frac{2}{2} = 1$$



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