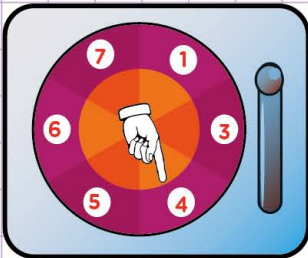


Name: Class:

Probability of mutually exclusive events and overlapping events

Mutually exclusive events can't never occur at the same time. So, $P(A \text{ or } B) = P(A) + P(B)$

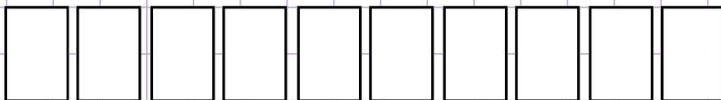
1. You spin the spinner once.
What is $p(\text{even or grater than } 6)$? Leave your answer as a percentage.



2. You flip a coin.
What is $P(\text{heads or tail})$? Leave your answer as a percentage.
3. If a card is drawn randomly from the pack of cards below, what is $P(\text{even and greater than } 6)$?
a. $4/8$ b. $7/8$ c. $1/2$ d. $3/8$



4. If a card is drawn randomly from the pack of cards below, what is $P(\text{odd and less than } 7)$?
a. $2/5$ b. $5/10$ c. $1/2$ d. $9/10$



5. You spin the spinner numbered from 1 to 6 once. What is $P(\text{odd or even})$? Simplify your answer as much as possible.
a. 1 b. $4/8$ c. $8/8$ d. $1/2$

6. If you roll a 6 - sided die, what is $P(3 \text{ or odd})$?
a. $2/3$ b. $1/6$ c. $1/3$ d. $5/6$

Name: Class:

Probability of mutually exclusive events and overlapping events

Mutually exclusive events can never occur at the same time. So, $P(A \text{ or } B) = P(A) + P(B)$

1. You spin the spinner once.

What is $P(\text{even or greater than 6})$? Leave your answer as a percentage.

The events are mutually exclusive.

There are 2 even numbers; 6, and 4.

$$P(\text{even}) = \frac{2}{6}$$

Now, we also find $P(\text{greater than 6})$.

There is only one number greater than 6; it is 7.

$$P(\text{greater than 6}) = \frac{1}{6}$$

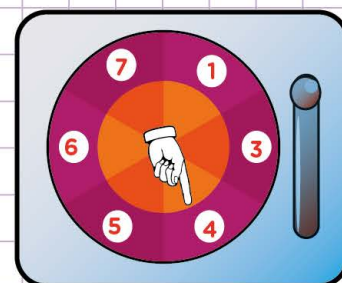
Now, we also find $P(\text{even or greater than 4})$.

$P(\text{even or greater than 4}) = P(\text{even}) + P(\text{greater than 4})$.

$$\frac{2}{6} + \frac{1}{6} = \frac{3}{6} = \frac{1}{2} = 0.5$$

Multiply 0.5 by 100 to convert to percentage = 50%

So, $P(\text{even or greater than 6}) = 50\%$



2. So, $P(\text{heads or tail}) = 100\%$

3. b. $7/8$

4. d. $9/10$

5. a. 1

6. a. $2/3$