

There are 52
cards in a
standard deck
of cards. How
many ways
can you be
dealt 5 cards?

719

How many ways
can you roll 2
dice and flip 3
coins?

2598960

A nightly drawing
for a lottery selects
5 numbers (1 – 30).

No number can
repeat. How many
drawings could
start with the
number 20?

(order does not matter to win the lottery)

288

A music app
shuffles the 7
songs you
have on your
device. How
many ways
could the app
create a
playlist?

23751

How many ways
can a person flip
4 coins in which
the 4th coin is
tails?

5040

A five digit security code is created.
How many more options does a person have if the digits can repeat versus if they cannot repeat?

8

How many ways
can you
rearrange the
word ATHENS?

69760

Out of 50 contestants on a gameshow, 3 of them will be selected to win \$1000. How many ways could the contestants be selected?

720

A person is asked to pick a letter, roll a die, and flip a coin. How many outcomes would we expect?

19600

6 family members
stand in line to
take a picture.
How many more
ways can they
stand in line if they
are not required to
line up from older
to youngest?

312