

Algebra 2

Combinations

YAY MATH!

The video covers the following exercises. Work along with the class!

Suppose there are 3 runners in a race, listed below. How many different finishes exist for these 3 runners?

Jeffrey

LaMarcus

Tebow

Suppose the same 3 people above need to form a committee, consisting of three people. How many different committees exist? Why?

How many different committees of 3 people can be selected from 8?

How many different 5-card poker hands exist in a deck of 52? (*Hint*: is a poker hand a permutation or a combination?)

You want to sell 5 DVD's from your collection of 12. How many different sets of 5 DVD's can you sell?

Some grocery shoppers are particular about arranging their items at checkout. How many different receipts could a shopper create with 10 items?

7 passengers await to fly stand-by. The airline has room for only 5 of them. How many different groups of passengers can board the plane?

When I get home, suppose I have 6 shows recorded. I'd like to watch 3 of them. If my lineup did *not* matter to me, how many arrangements of shows can I have? (And, what if order *did* matter?)