

1. Suppose Briana wakes up in the morning and finds that she has three pairs of shorts and four shirts. How many ways can she dress for school?



Answer this by drawing out a tree diagram

2. How many 3 digit numbers can you create using only the digits 1, 2, and 3 using each number only once?

What if you can use each digit multiple times?

What if you can only use the digits 0, 1, and 2 once? Multiple times?

What about a 4 digit number where you can use 1, 2, and 3 multiple times?

3. Ernie flips a coin 12 times - how many different patterns can he get(don't find the number, just the pattern).

4. There are 4 blouses and 5 dresses a girl can choose from, and 3 pairs of shorts and 6 t-shirts a boy can choose from.

How many outfits can the girl wear?

How many outfits can the boy wear?

How many combinations of outfits can the two wear?(they aren't sharing any clothes)

5. How many even two digit numbers are there?

6. Four people want to sit in a row. How many ways can they be ordered?

7. There are 5 desks in a row and 3 friends want to sit in them. How many ways can they be ordered?

8. There is a classroom with 20 desks arranged in 4 columns of 5 desks. 4 friends, Amy, Bellie, Cary, and Denice want to sit in the same row. How many ways can they do so?