1. You have 5 different T-shirts and 4 different shorts. Every T-shirt can be used with any shorts except the special one from 2564III shop. It has to go with the only one bright blue short that you have. In how many ways can you wear these T-shirts and shorts?

Activity 6-2 (5 Aug 2021)

2. [LPV] *n* boys and *n* girls go out to dance. In how may ways can they all dance simultaneously? (We assume that only couples of different gender dance with each other.)

Name_

Activity 6-3 (5 Aug 2021)

3. How many numbers from 1 to 1,000 that are divisible by 2 or 3 or 5? We will try to answer this question in small steps.

- (a) How many numbers from 1 to 1,000 that are divisible by 2?
- (b) How many numbers from 1 to 1,000 that are divisible by 3?
- (c) How many numbers from 1 to 1,000 that are divisible by 5?

(d) How many numbers from 1 to 1,000 that are divisible by 6? How many numbers from 1 to 1,000 that are divisible by 10? How many numbers from 1 to 1,000 that are divisible by 15? How many numbers from 1 to 1,000 that are divisible by 30?

(f) Finally, how many numbers from 1 to 1,000 that are divisible by 2 or 3 or 5?