

Name _____ ID _____

Activity 6-1 (13 Sep 2018)

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 BNK16 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?

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

3. How many numbers from 1 to 1,000 that are divisible by 2 or 3 or 5?

(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) Give the final answer to question 3 here: