

Name \_\_\_\_\_

## Finite Mathematics (Math 10120), Spring 2020

### Quiz 2, Wednesday, February 19

1. A standard deck of 52 cards has 12 face cards: the jack, queen and king of each of the four suits. If you pick **two** cards at random from the full deck, what is the probability that both of them will be face cards? You can use combination and/or permutation notation in your answer.

**Answer:**

2. A tetrahedral die has four corners (vertices), numbered 1 to 4. Each corner is equally likely to be at the top when you roll the die. (In this picture, 4 is at the top.)



María has two tetrahedral dice: a blue one and a red one, and she rolls them at the same time. She records the sum of the numbers that come up on top (so the sum is a number between  $1 + 1 = 2$  and  $4 + 4 = 8$ ). What is the probability that the sum is 5? Express your answer as a number (a fraction).

**Answer:**