# Mathematics Class Slides Bronx Early College Academy

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12 November 2019

- 3.1 Introduction to probability 13 Nov
- 3.2 Probability as fractions 14 Nov
- 3.3 Sample spaces & Venn diagrams 18 Nov
- 3.4 Set operations on Venn diagrams 2 Dec
- 3.5 Using tree diagrams 4 Dec
- 3.6 Using tree diagrams 5 Dec

## GQ: How do we use mathematics to explore a topic?

CCSS: HSS.CP.A.4 Understand conditional probability 3.1 Wednesday 13 Nov

#### Do Now Skills check page 205

- 1. Treat probabilities as fractions between zero and one
- 2. Use tables to organize data

Afterschool today; parent conferences tomorrow 4:00-7:00, Friday Lesson: theoretical and experimental probabilities, notation Homework: Read and evaluate sample exploration paper according to criteria pp. 737-740

## GQ: How do we quantify uncertainty?

CCSS: HSS.CP.A.4 Understand conditional probability

3.2 Thursday 14 Nov

#### 2.16 Do Now: Dice probability

1. probability tables (pdf)

Scoring an exploration paper Lesson: Probability calculations

Homework: Textbook exercises 5A p. 210-211; exploration paper

## GQ: How do we organize the event space for analysis?

CCSS: HSS.CP.A.4 Understand conditional probability 3.3 Monday 18 Nov

#### 2.16 Do Now: Express each probability as a fraction

- 1. Rolling a twelve with two dice
- 2. Drawing an ace from a deck of cards
- 3. Having a birthday on a weekday
- 4. Two students in a class of 30 have the same birthday

Review homework problems 5A p. 211

Lesson: Venn diagrams and sample spaces

Homework: Textbook exercises 5B p. 215; exploration paper

## GQ: How do we combine events on a Venn diagram?

CCSS: HSS.CP.A.4 Understand conditional probability

3.4 Monday 2 Dec

#### Do Now: Using Venn diagrams to organize a situation

- 1. Listing sets
- 2. The universal set *U*
- 3. Items in, or not in, multiple sets

Review homework problems 5B p. 211 Example email conventions

Lesson: 5.3 Set operations & Venn diagrams

Homework: Textbook exercises 5C p. 220

Exploration paper due Friday

GQ: How do we diagram a situation with a tree?

CCSS: HSS.CP.A.4 Understand conditional probability 3.5 Wednesday 4 Dec

### Do Now: Conditional probablity from a matrix

- 1. What is the probability of each event overall?
- 2. What is the probability conditional on each subset?

Review homework problems 5C p. 220

Lesson: 5.4 Probability and tree diagrams

Homework: Textbook exercises 5D p. 223-4

Exploration paper due Friday

GQ: How do we diagram a situation with a tree?

CCSS: HSS.CP.A.4 Understand conditional probability 3.6 Thursday 5 Dec

Do Now: Conditional probablity

- 1. Organizing with a Venn diagram
- 2. Using a tree to organize a situation

Review homework problems Lesson: 5.4 Probability and tree diagrams

Homework: Exploration paper due tomorrow 10:00pm