1.1 IB Math - Unit 6 Probability
Bronx Early College Academy

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30 January - 14 February 2019

BECA / Dr. Huson / 11.1 IB Math - Unit 6 Probability

GQ: How do we talk about probability?

Do Now: Skills check p. 62 #1-2

Lesson: History of the study of games of chance, sample space, frequency

Homework: Exercises 3A p. 67-68

GQ: How do we notate sample spaces with Venn diagrams?
CCSS: HSS.CP.A.3 Understand conditional probability   6.2 Thursday 31 January

Do Now: Probability handout

Lesson: Sets, complements, union, intersection, empty set

Homework: Exercises 3B p. 71-72

GQ: How do we add the probabilities of multiple events?

CCSS: HSS.CP.A.3 Understand conditional probability   6.3 Monday 4 February

Do Now: Draw a Venn diagram of these 110 students:

- ▶ 25 students took physics
- ▶ 45 students took biology
- ▶ 48 students took mathematics
- ▶ 10 students took physics and mathematics
- ▶ 8 students took biology and mathematics
- ▶ 6 students took biology and physics
- ▶ 5 students took all three subjects

How many took biology, but neither physics nor mathematics?
How many students did not take any of the three subjects?

Lesson: The addition rule, probability
Homework: Exercises 3C p. 74-75 Unit test Thursday

GQ: How do we calculate probability?

CCSS: HSS.CP.A.3 Understand conditional probability   6.4 Wednesday 6 February

Do Now: Pretest review packet

Lesson: Review for unit test

Homework: study for test tomorrow. Arrive at 8:00 sharp!

GQ: How do we calculate probability?
CCSS: HSS.CP.A.3 Understand conditional probability   6.5 Thursday 7 February

Assessment: Probability unit test

Homework: Handout practice problems

GQ: How do we add the probabilities of multiple events?

CCSS: HSS.CP.A.3 Understand conditional probability   6.6 Monday 11 February

Do Now: A six-sided, fair die is rolled 100 times, with x representing each value rolled. Draw a Venn diagram to represent the 100 events.

► $\{x$ is an even number $\}$ was rolled 57 times

► $\{x : x < 4\}$ occurred 44 times

► $\{x : x = 2\}$ occurred 15 times

How many times was $x = 5$ rolled?

Test question review

Lesson: Mutually exclusive sets, sample space diagrams

Homework: Exercises 3D p. 76-77, 3E #1-2 p. 79

GQ: How do we add the probabilities of multiple events?
CCSS: HSS.CP.A.3 Understand conditional probability   6.7 Tuesday 12 February

Deltamath probability practice

Homework: Complete Deltamath exercises

GQ: How do we multiply the probabilities of multiple events?

CCSS: HSS.CP.A.3 Understand conditional probability   6.8 Wednesday 13 February

Do Now: 3E p. 80

- ▶ medium: exercise #3
- ▶ spicy: exercise #5

Test question review
Lesson: Independence and multiplying probabilities

Homework: Exercises 3F p. 82-84

GQ: How do we calculate probability given another condition?

CCSS: HSS.CP.A.3 Understand conditional probability   6.9 Thursday 14 February

Do Now: Read the Monty Hall problem, p. 88. Be prepared to discuss

Test question review
Lesson: Conditional probability

Homework: Exercises 3G p. 86-88

GQ: How do we calculate probability given another condition?

Do Now: Read the Monty Hall problem, p. 84. Be prepared to discuss

Lesson: Conditional probability

Homework: Exercises 3G p. 86-88

GQ: How do we calculate probability given another condition?

CCSS: HSS.CP.A.3 Understand conditional probability   6.11 Tuesday 26 February

Do Now: Deltamath probability practice

► Differentiated skills practice
► Probability applications review

Assessment: Homework review
Lesson: Conditional probability problem situations

Homework: Complete Deltamath exercises

GQ: How do we diagram a situation as a tree?
CCSS: HSS.CP.A.3 Understand conditional probability   6.12 Thursday 28 February

Do Now: Re the Monty Hall problem, p. 84

1. Given you pick door #1, find the probabilities that the prize is behind each door.
2. Again, assuming you picked door #1, for each case for where the prize is (i.e. 3 cases), which door might Monty reveal to you, and with what probability?
3. For homework 3G #12 p. 88, diagram the situation as a 2-by-2 matrix

Homework review
Lesson: Probability tree diagrams, with and without replacement

Homework: Exercises 3H p. 90 (optional 3I p. 93)

GQ: How do we tell if events are independent?

CCSS: HSS.CP.A.3 Understand conditional probability   6.13 Tuesday 5 March

Do Now: Deltamath probability practice

- ▶ Differentiated skills practice
- ▶ Probability applications review
- ▶ Logarithm review

Assessment: Homework review

Lesson: Independence related to conditional probabilities

Parent conferences this Thursday evening, Friday afternoon

Homework: Complete Deltamath exercises