11.1 IB Math - Unit 8 Descriptive Statistics Bronx Early College Academy

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- 8.1 Introduction and definitions Monday 6 May
- 8.2 Deltamath summary statistics, Tuesday 6 May
- 8.3 Central tendency Wednesday 8 May
- 8.4 Central tendency Thursday 9 May
- 8.5 Standard deviation Monday 12 May
- 8.6 Standard deviation Tuesday 13 May

GQ: How do we determine the features of a population?

HSS.ID.A.1-4 Summarize, represent, and interpret data on a single measurement variable 8.1 Monday 6 May

Do Now: Skills Check p. 254

Lesson: Qualitative & quantitative data, graphing, definitions p.255-9

Homework: Exercises 8B p. 259

GQ: How do we determine the features of a population?

CCSS: HSS.ID.A.1-4 Summarize, represent, and interpret data on a single measurement variable 8.2 Tuesday 7 May

Deltamath probability practice

Homework: Complete Deltamath exercises

GQ: How do we determine the "center" of a population?

 $\begin{tabular}{ll} HSS.ID.A.1-4 & Summarize, represent, and interpret data on a single measurement variable \\ 8.3 & Wednesday 8 & May \end{tabular}$

Do Now: Sequences review

- 1. An arithmetic sequence begins $4, k, 10, \dots$ Find k.
- 2. Find the value of the 8th term of the sequence.
- 3. The sum of the first n terms in the sequence is 589. Find n.

Lesson: Measures of central tendency: mean, median, & mode p. 260-7

Using class interval midpoints for frequency table calculations.

Homework: Exercises 8C, 8D, 8E. Select an appropriate number of problems.

GQ: How do we determine the "spread" of a population?

HSS.ID.A.1-4 Summarize, represent, and interpret data on a single measurement variable 8.4 Thursday 9 May

Do Now: Enter the frequency table data shown in a calculator.

Answer the questions both with the calculator and by hand.

Value	0	1	2	3	4
Freq.	2	6	4	2	1

- 1. How many data are there (n = ?)? List them.
- 2. Write down the mode. Find the median and mean.
- 3. Sketch a histogram to represent the data.

Lesson: 8.4 Measures of dispersion: max, min, range, quartiles, IQR, & 5-figure summary p. 267-271 Using class interval midpoints for frequency table calculations. Cumulative distributions p. 271-2

Homework: Exercises 8F, 270-1 (8G).

GQ: How do we quantify the dispersion of a population?

HSS.ID.A.1-4 Summarize, represent, and interpret data on a single measurement variable 8.5 Monday 12 May

Do Now: The frequency table represents the scores of an IB class out of a 90-point exam.

Score	10 ≤ <i>x</i> < 30	$30 \le x < 50$	$50 \le x < 70$	$70 \le x < 90$
Freq.	4	6	3	2

- 1. How many students are there?
- 2. Write down the modal class.
- 3. Estimate the median, quartiles, and the mean.
- 4. Sketch a histogram to represent the data.

Cumulative distributions, #6 p. 275 Lesson: 8.6 Standard deviation p. 276-281

Homework: Exercises 8H, 279-280.

GQ: How do we "rangle" a dataset?

HSS.ID.A.1-4 Summarize, represent, and interpret data on a single measurement variable 8.6 Tuesday 13 May

Do Now: If you had access to the passenger roster of the Titanic, what interesting questions would you explore?

- 1. Write down a question regarding the types of passengers on the Titanic's maiden voyage.
- 2. Write a question regarding who survived versus died.
- 3. Suggest calculations that answer the questions.
- 4. What types of graphs might you make?

Cumulative distributions, #6 p. 275 Lesson: Working with datasets using modern technology

Homework: Review exercises 281-284.