IN CLASS

Probability Lesson 5: Venn Diagrams

Explore:

Ex. 1

There are 38 students in Mr. Peacock’s 2A Math Studies class. Create a Venn diagram that shows there are 12 students with blue eyes.

* What is the probability that a student in that class has blue eyes?
* What is the probability that a student in that class does not have blue eyes?

Explore:

Ex. 2

A sport club contains 75 members. 15 just play tennis. 26 just play hockey. 27 play both. Create a Venn diagram with this data. Then determine:

* The probability someone plays neither tennis nor hockey.
* The probability someone plays hockey.
* The probability someone plays tennis.
* The probability someone plays both hockey and tennis.

Explore:

Ex. 3

In a class of 30 students, 16 study physics, 20 study Biology, and 3 study neither. Create a Venn diagram with this information and then determine the probability that a random student from the class studies:

* Both subjects
* Physics but not Bio
* Bio but not Physics
* At least one of the subjects
* Exactly one of the subjects
* Bio given that the student takes Physics

APPLY

p. 287 #2, 3, 4-6, 8, 10