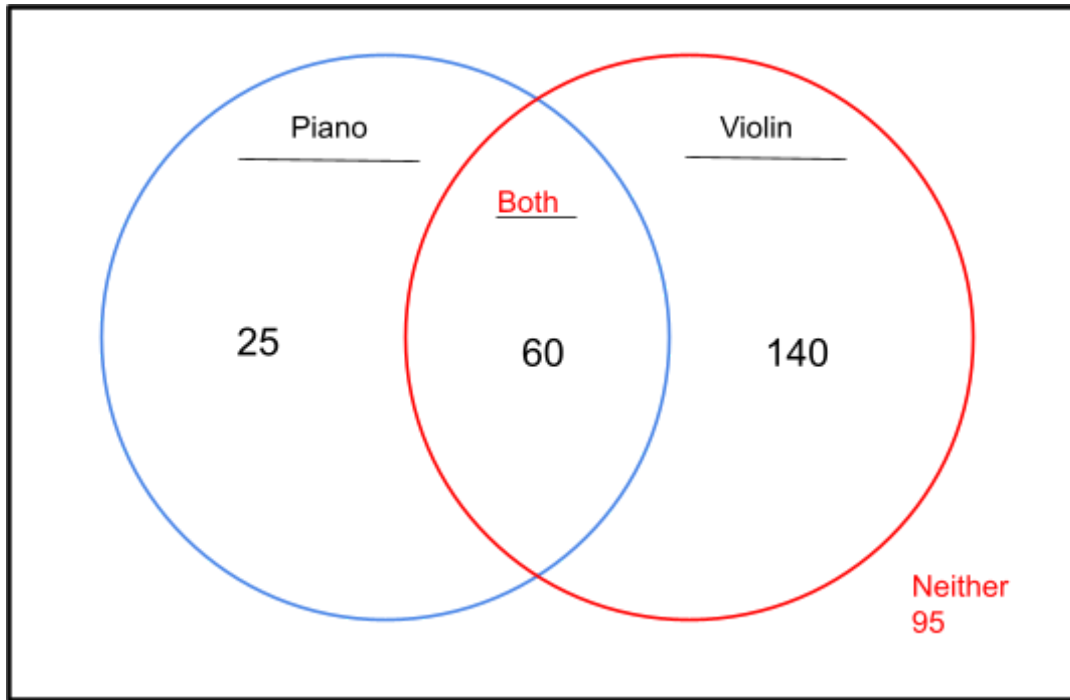


Interpreting Venn Diagrams

UCLA Olga Radko Math Circle Beginners 2

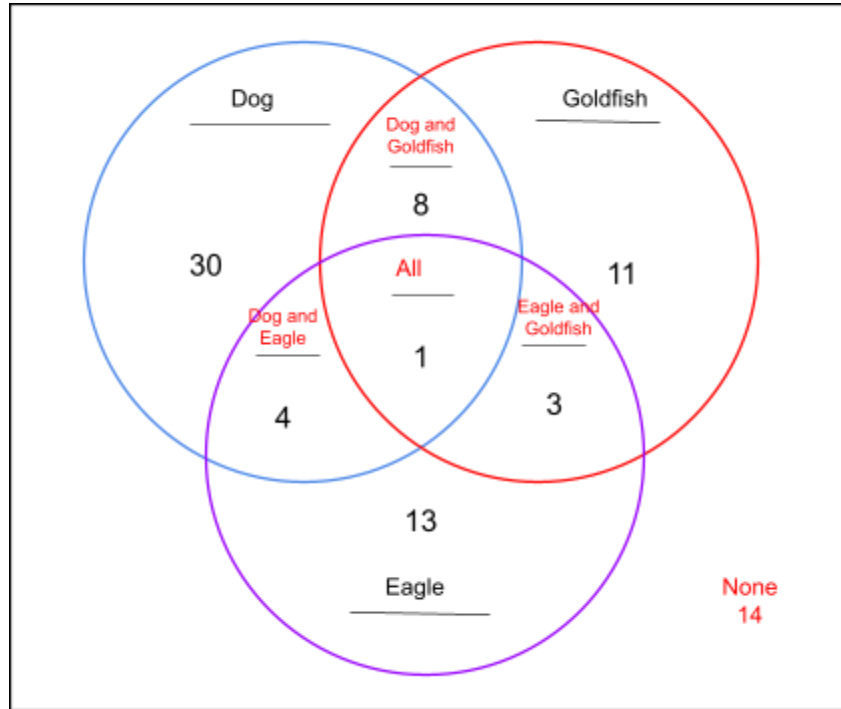
5/23/2021



Problem 1:

1. Paul asked 320 students whether they played the piano and the violin.
 - a. Fill in the missing pieces of the Venn Diagrams.
 - b. Based on the Venn Diagram, how many play:
 - i. Piano Only: 25
 - ii. Violin Only: 140
 - iii. Piano: 85
 - iv. Violin: 200
 - v. Violin and Piano: 60
 - vi. Neither: 95

Problem 2:



1. Marcus asked 84 pet owners whether they own a goldfish, a dog, and an eagle.

c. Fill in the missing pieces of the Venn Diagrams.

d. Based on the Venn Diagram, how many own:

- i. Dog Only: 30
- ii. Eagle Only: 13
- iii. Dog and Goldfish: 9
- iv. Dog and Eagle, but not Goldfish: 4
- v. Eagle and Dog: 5
- vi. None of Them: 14

vii. *All of Them: 1*

viii. *Dog: 43*

ix. *Goldfish: 23*