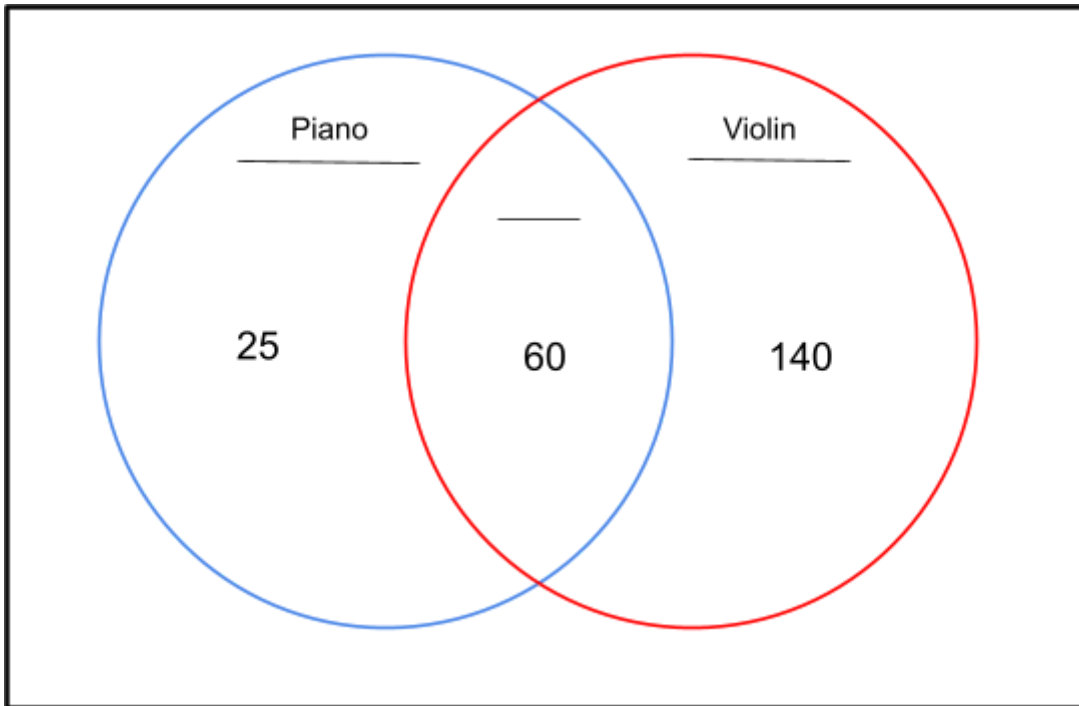


## Interpreting Venn Diagrams

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: \_\_\_\_\_

ii. Violin Only: \_\_\_\_\_

iii. Piano: \_\_\_\_\_

iv. Violin: \_\_\_\_\_

v. Violin and Piano: \_\_\_\_\_

vi. Neither: \_\_\_\_\_

**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: \_\_\_\_\_*
- ii. Eagle Only: \_\_\_\_\_*
- iii. Dog and Goldfish: \_\_\_\_\_*
- iv. Dog and Eagle, but not Goldfish: \_\_\_\_\_*
- v. Eagle and Dog: \_\_\_\_\_*
- vi. None of Them: \_\_\_\_\_*

vii. *All of Them:* \_\_\_\_\_

viii. *Dog:* \_\_\_\_\_

ix. *Goldfish:* \_\_\_\_\_