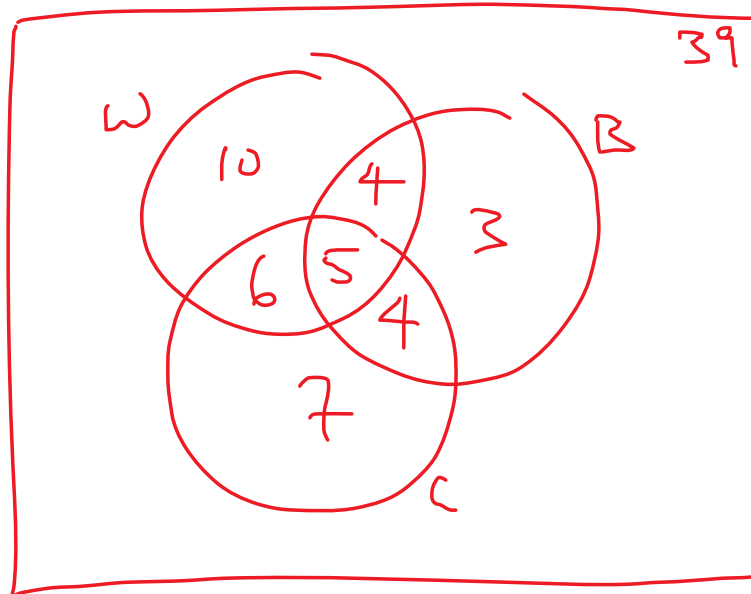


Chapter 1.4 - Venn Diagram Practice

1. In a school, the following information was collected about the different ways level III students got to school in the month of September.

- 25 students walked to school
- 16 students rode their bike
- 22 students drove their car
- 9 students walked and biked
- 11 students walked and drove their car
- 9 students biked and drove their car
- 5 students used all three methods

If these are the only three methods the students used to get to school, how many students are in the level III class?

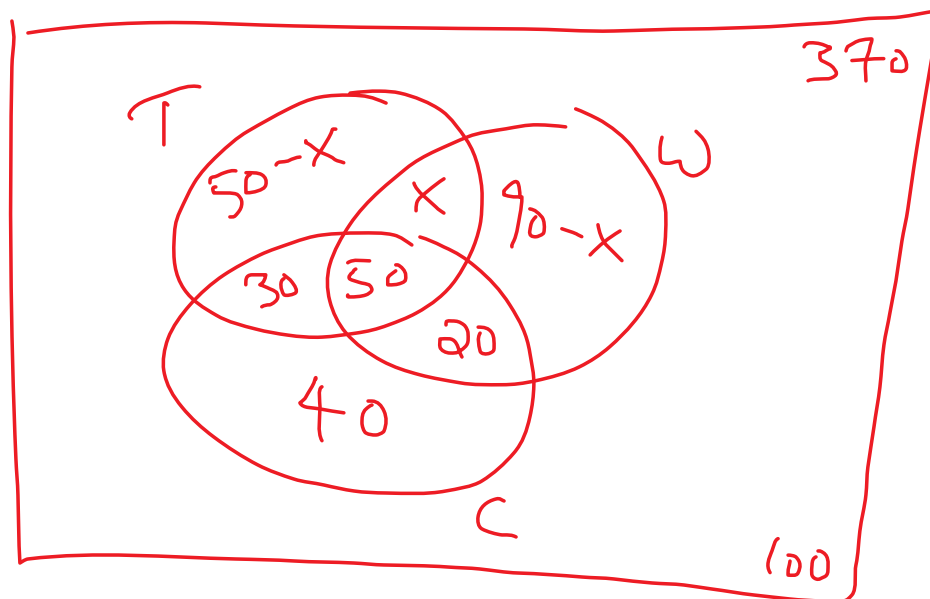


$$10 + 4 + 3 + 6 + 5 + 4 + 7 = \underline{39}$$

2. A survey of 370 people concerning their shopping habits shows that:

- 130 people shop at Target.
- 160 people shop at Walmart.
- 140 people shop at Costco.
- 80 people shop at Target and Costco.
- 70 people shop at Walmart and Costco.
- 50 people shop at all three stores.
- 100 people don't shop in either of these stores.

How many people shop at Target and Walmart?



$$50 - X + X + 90 - X + 30 + 50 + 20 + 40 = 270$$

$$280 - X = 270$$

$$280 - 270 = X$$

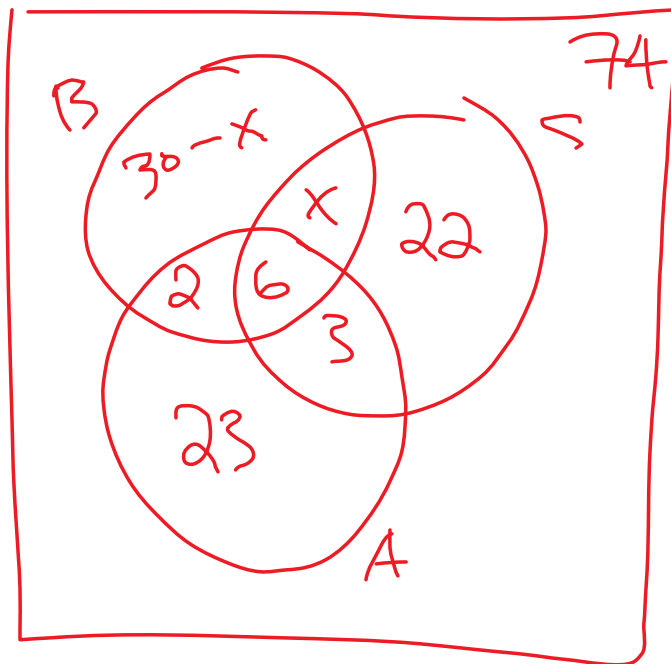
$$X = 10$$

$10 + 50 = 60$ shop at Target & Walmart.

3. In a college 74 part-time students fill out registration forms:

- 38 want the Business course.
- 31 want the Science course.
- 8 want both the Art course and the Business course.
- 23 want the Art course only.
- 9 want both the Art Course and the Science course.
- 6 want all three courses.

How many want the Business course only?



$$30-x + x + 22 - x + 2 + 6 + 3 + 23 = 74$$

$$86 - x = 74$$

$$86 - 74 = x$$

$$x = 12$$

$30 - 12 = 18$ want the business course only.