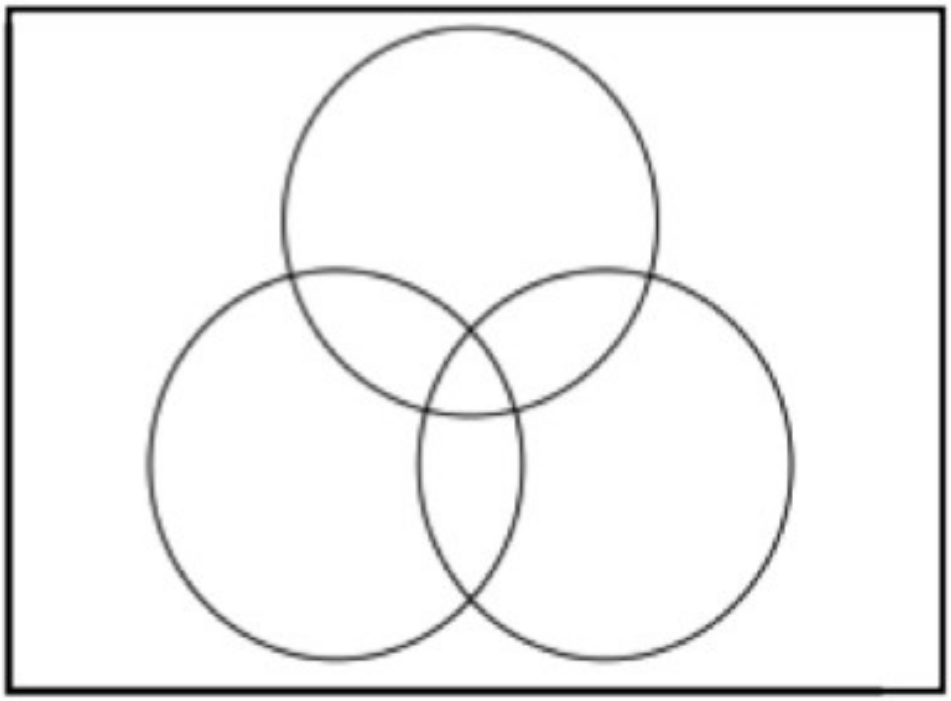
Use a Venn Diagram to summarize and analyze the data in each problem. Then use it to answer the questions.

1. Toward the middle of the season, peaches for canning tend to come in three types: early, late and extra late, depending on the expected date of ripening. During one week, the following data were recorded at a small peach receiving station.

- 16 trucks were dispatched carrying early peaches
- 36 trucks had late peaches
- 33 trucks had extra late peaches
- 13 trucks had early and late peaches
- 15 trucks had late and extra late peaches
- 1 truck had early and extra late peaches
- no trucks had all three types



Determine the number of trucks:

(a) carrying only late peaches

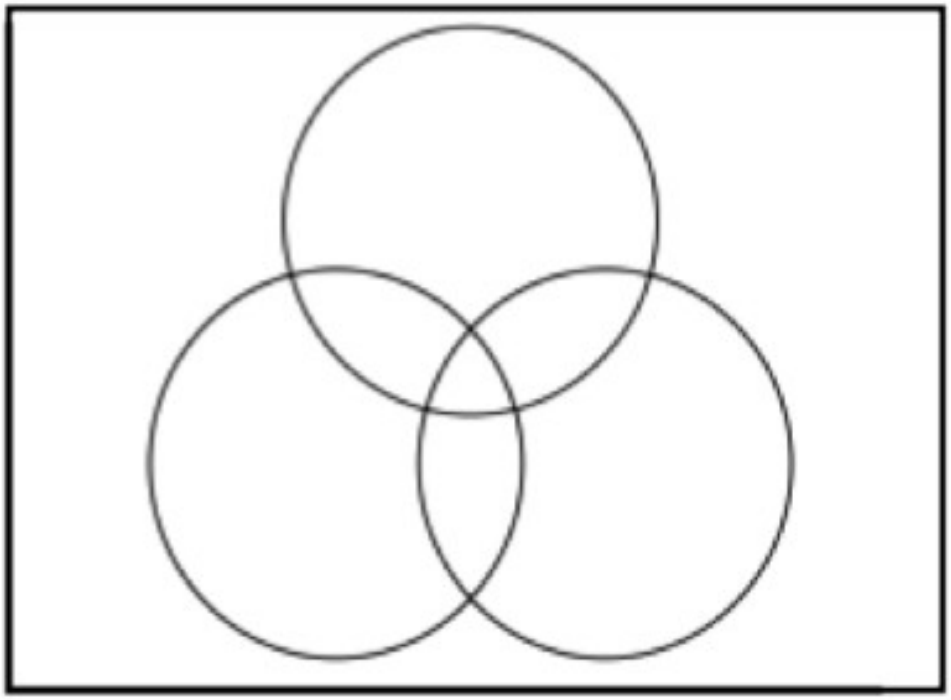
(b) carrying only one variety of peaches

(c) carrying exactly two varieties of peaches

(d) Determine the total number of trucks.

2. A group of 195 people were polled to see if they watched certain TV programs, which we will refer to as programs A, B and C. The results were:

- 39 watch A
- 90 watch B
- 51 watch C
- 10 watch all three
- 16 watch both B and C
- 30 watch C only
- 14 watch both A and B



Determine how many:

(a) did not watch any of the three shows.

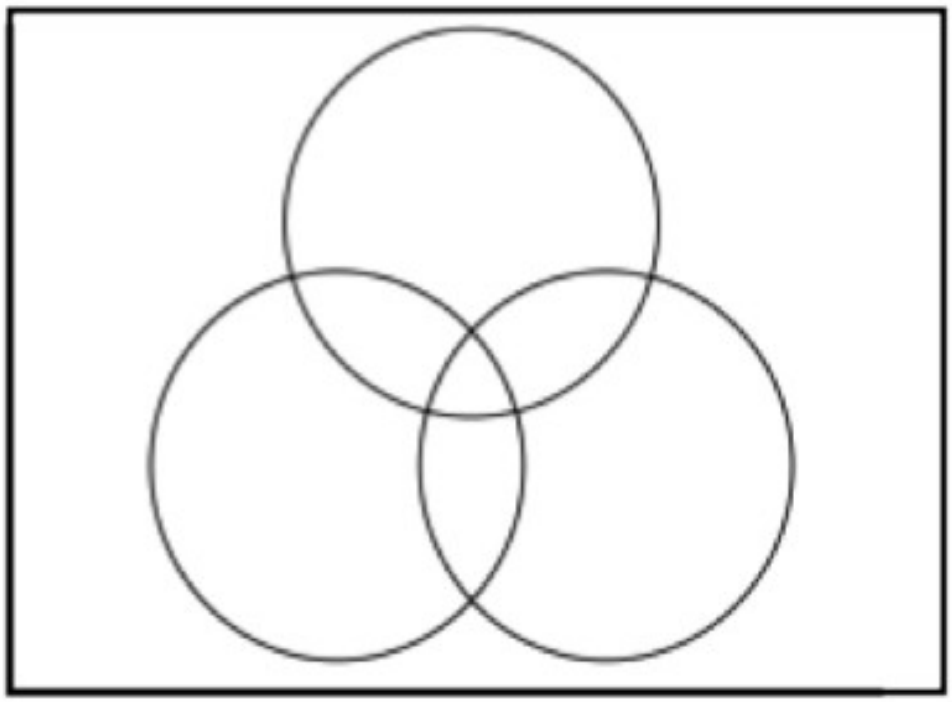
(b) watch at least two of these programs.

(c) watch either B or C.

(d) watch both A and C.

3. A survey of 100 Atlanta residents was taken to determine how well they liked the Braves, the Falcons and the Hawks. It was found that:

- 63 liked the Braves
- 62 did not like the Falcons
- 18 did not like the Falcons or the Hawks
- 30 liked the Falcons and the Braves
- 28 did not like the Hawks
- 20 like all three
- 15 did not like any of the three



Determine how many like:

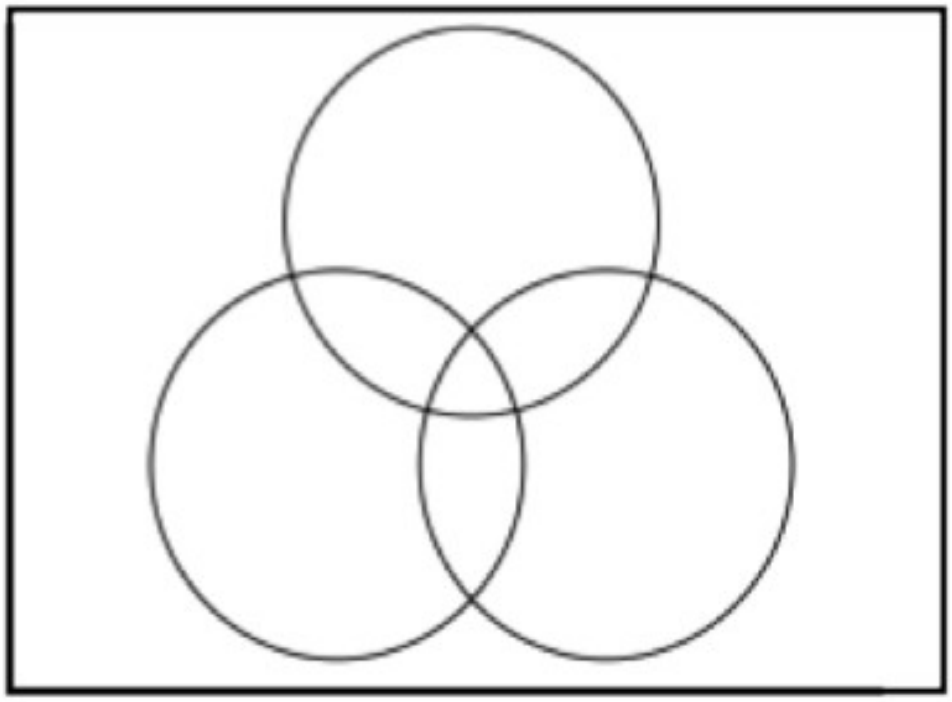
(a) only the Hawks

(b) both the Hawks and the Falcons

(c) at least two of the three

4. Five hundred men were asked at which of three grocery stores (Kroger, Publix, Costco) they shopped. The results were as follows:

- 230 shop at Kroger
- 115 shop at Publix
- 170 shop at Costco
- 5 shop at all three
- 20 shop at Kroger and Costco
- 15 shop at Costco and Publix
- 35 shop at Kroger and Publix



Determine how many of these men shop at:

(a) Kroger only

(b) Costco and Publix only

(c) Kroger and Costco

(d) either Costco or Publix

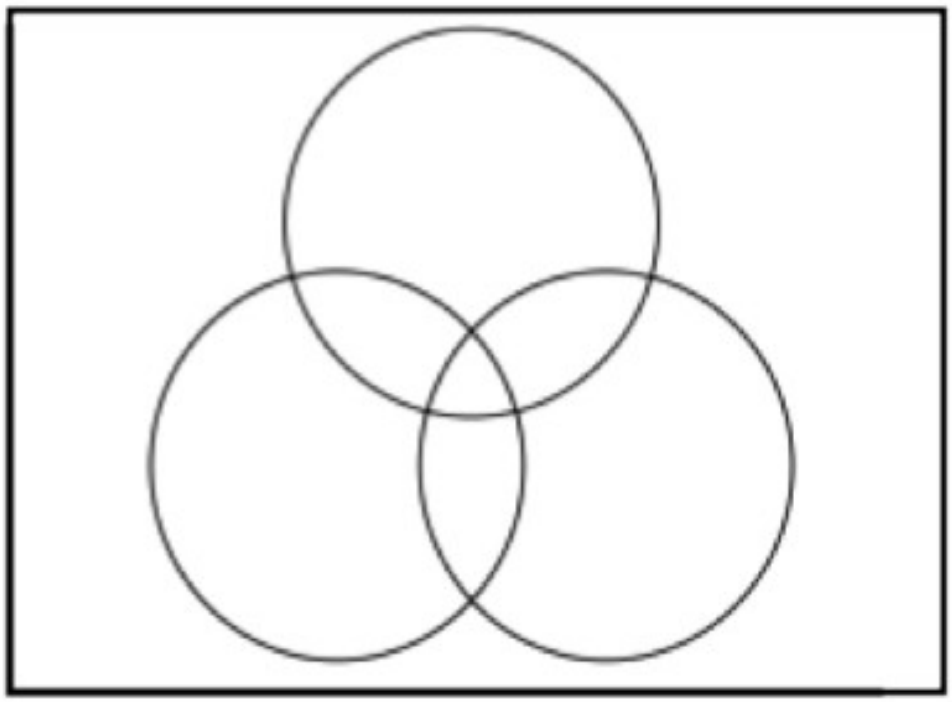
(e) exactly one of the three stores

(f) at least two of the three stores

(g) none of the three stores

5. A survey of 180 people showed that:

- 60 like hamburgers
- 95 like chicken
- 120 like pizza
- 55 like pizza but not chicken
- 45 like hamburgers and pizza
- 10 like hamburgers only
- 30 like all three



Determine how many:

(a) do not like any of the three.

(b) like chicken only

(c) like at least one of the three

(d) like hamburgers and chicken

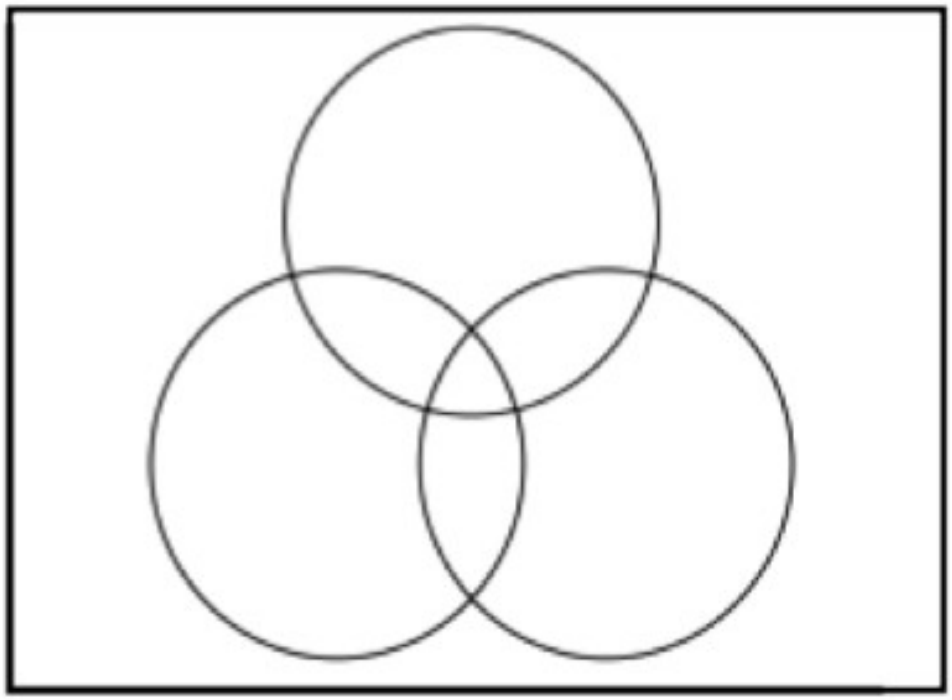
(e) like hamburgers and chicken but not pizza

(f) like exactly one of the three

(g) like either pizza or chicken

(h) like exactly two of the three

6. In a certain math course, a survey was taken. It showed that:
   - 450 passed the course
   - 10 of those who failed still liked the course
   - 25 of those who failed signed up for another math course
   - 55 of those who liked the course signed up for another math course
   - 60 of those who passed the course signed up for another math course
   - 350 of those who passed the course liked it
   - 300 of those who passed the course liked it but didn't sign up for another course
   - 130 didn't like the course



Determine how many:

(a) were surveyed

(b) liked the course

(c) didn't pass the course

(d) of those who failed the course, disliked it and didn't sign up for another math course

(e) of those who did not like the course passed it

(f) passed the course, liked it and signed up for another math course