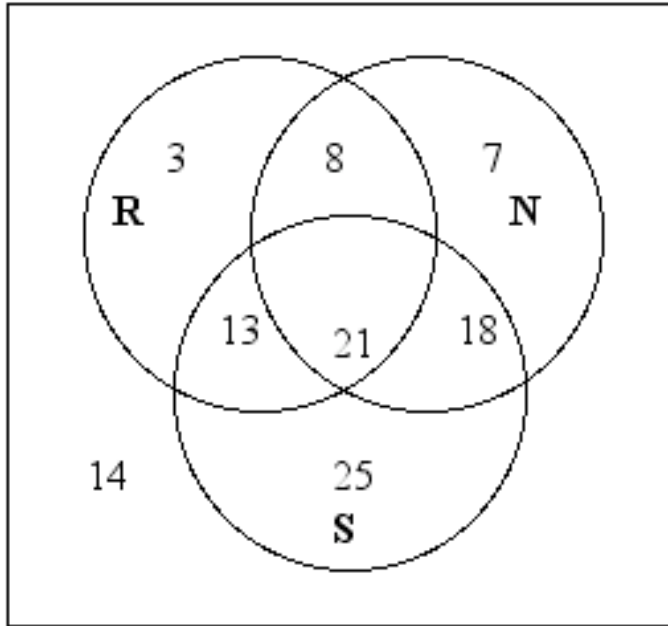**HOMEWORK EXERCISES**

1. A number of deer were surveyed about activities that they enjoy. The results are summarized in the Venn diagram below.

R: enjoy running
N: enjoy nibbling
S: enjoy staring into headlights

How many…
A. …enjoy running or staring into headlights?
B. …enjoy nibbling and running?
C. …enjoy exactly one of these activities?
D. …enjoy staring into headlights but not running?
E. …enjoy nibbling?

2. A survey of 50 Yugo drivers revealed the following: three drive Yugos because of the comfort; four drive Yugos because of the reliability; one drives a Yugo for both of these reasons.

A. How many drive Yugos for neither of these reasons?
B. How many drive Yugos because of the comfort but not because of the reliability?

3. 110 dogs were asked "Why do you like to eat garbage?"
89 said "It tastes great!"
87 said "It's more filling!"
68 said "It tastes great!" and "It's more filling!"

A. How many said "It's more filling!" but didn't say "It tastes great!"?
B. How many said neither of those things?

4. A number of whales were asked about things that they dislike.
19 dislike giant squids
6 dislike giant squids and pollution and Captain Ahab
24 dislike Captain Ahab
4 dislike pollution but don't s dislike giant squids and don't dislike Captain Ahab
11 dislike Captain Ahab and giant squids
3 dislike pollution and Captain Ahab but don't dislike giant squids
20 dislike pollution
5 have no dislikes
A. How many whales were surveyed?
B. How many dislike at least one of those three things?
C. How many dislike Captain Ahab but don't dislike giant squids?
D. How many dislike giant squids or pollution?

5. A number of classicists were asked to identify their favorite epic poets. The results are summarized below.
62 appreciate Homer   40 appreciate Virgil   5 appreciate Gomer
2 appreciate Homer and Virgil and Gomer
3 appreciate Virgil and Gomer
20 appreciate Homer and Virgil
42 appreciate Homer and neither of the other two
12 appreciate none of these three epic poets
A. How many were surveyed?
B. How many don't appreciate Gomer?
C. How many appreciate Homer or Gomer?
D. How many appreciate exactly one of the three epic poets?

6. Fifty elephants were asked about things that they like.

8 like tigers   6 like ivory carvings   9 like mice

1 likes all three of these things   4 like tigers and ivory carvings

5 like tigers and mice   3 like mice and ivory carvings

A. How many like none of these things?

B. How like ivory carvings but don't like tigers?

C. How many like fewer than two of these things?

D. How many like mice or ivory carvings?

7. The members of the Gainesville Film Critics Society were surveyed regarding their cinematic heroes.

38 admire Moe   36 admire Larry   21 admire Curly

23 admire Moe and admire Larry   5 admire Larry and admire Curly

7 admire Moe and admire Curly

3 admire Moe and admire Larry and admire Curly

16 don't admire Moe and don't admire Larry and don't admire Curly

A. How many were surveyed?

B. How many admire at least one of the Stooges?

C. How many admire Moe or Larry?

8. A number of Yugo owners were surveyed regarding their favorite activities.

57 enjoy walking   65 enjoy waiting for tow trucks   60 enjoy hitchhiking

20 enjoy waiting for tow trucks and enjoy hitchhiking and enjoy walking

22 enjoy hitchhiking and enjoy walking

12 don't enjoy waiting for tow trucks and don't enjoy hitchhiking and don't enjoy walking

23 enjoy walking but don't enjoy hitchhiking and don't enjoy waiting for tow trucks

38 enjoy waiting for tow trucks and enjoy hitchhiking

A. How many were surveyed?

B. How many enjoy at least two of these activities?

9. 100 Neanderthals were surveyed regarding their favorite possessions.

13 own a bone and own a stick   32 own a stick

3 own a rock and own a bone and own a stick

30 own a rock   14 own a rock and own a bone

31 own a bone   12 own a rock and own a stick

How many own none of these things?

ANSWERS TO LINKED EXAMPLES

EXAMPLE 1.3.2	**1.** 34	**2.** 8		
EXAMPLE 1.3.4	**1.** 5	**2.** 5	**3.** 33	**4.** 24
EXAMPLE 1.3.5	**1.** 5	**2.** 63	**3.** 18	

ANSWERS TO HOMEWORK EXERCISES

1. A. 88   B. 29   C. 35   D. 43   E. 54
2. A. 44   B. 2
3. A. 19   B. 2
4. A. 41   B. 36   C. 13   D. 26
5. A. 96   B. 91   C. 65   D. 63
6. A. 38   B. 2   C. 40   D. 12
7. A. 79   B. 63   C. 51
8. A. 122   B. 52
9. 43