# EXAMPLE 1

The following produce is sold at a farmers’ market:

* corn, apples, onions, beets, carrots, parsnips, tomatoes, asparagus, beans, watermelon

Determine the number of food types with each quality.

1. Round
2. Grows underground
3. Either round or grows underground
4. Is neither round nor grows underground

# PRACTICE 1

Consider the Venn diagram shown.

1. Determine V ∪ C
2. Determine n(V ∪ C)
3. Determine V ∩ C
4. Determine n(V ∩ C)

# PRACTICE 2

Consider the following two sets: A = {-5, -3, -1, 1, 3, 5} B = {1, 2, 3, 4, 5, 6}

1. Determine
	* A ∪ B
	* n(A ∪ B)
	* A ∩ B
	* n(A ∩ B)
2. Draw a Venn diagram to show these two sets.

# PRACTICE 3

Angelo asked 85 people if they liked chocolate or cherry frozen yogurt.

* 6 people did not like either flavor; 16 people liked both flavours; 42 people liked only chocolate

Determine how many people only liked cherry.

# PRACTICE 4

Fraser asked 65 people at the mall if they liked to listen to audio books or read printed books.

* 9 people did not like either; 39 people liked audio books; 31 people liked printed books

Determine how many people liked both types, how many liked only audio books, and how many liked only printed books.

# PRACTICE 5

Dariya keeps track of the people who attend fitness classes at the local exercise club. In one week, 600 people used the club.

* 41 people did not do cardio or weight classes; 437 people did cardio classes; 268 people did weight classes

Determine how many people did both cardio and weight classes.

# PRACTICE 6

On an ocean liner, 741 passengers were asked if they would like fish or vegetable stew for dinner.

* All passengers liked at least one of these choices; 100 liked fish and stew equally; 239 preferred fish.

Determine how many passengers preferred the stew.

# PRACTICE 7

At Saskatoon’s John G. Diefenbaker International Airport, Claude asked 103 people if they had visited Regina or Winnipeg within the past year.

* 8 people had not been to either city; 55 people had been to Winnipeg; 70 people had been to Regina.

Determine how many people had been to both cities.

# PRACTICE 8

Becky is a travel agent. She has kept track of why all of her 948 clients have travelled the past year.

* 539 people travelled for pleasure; 398 people travelled for business ; 29 people travelled for neither business nor pleasure.

Determine how many people travelled for business and pleasure.