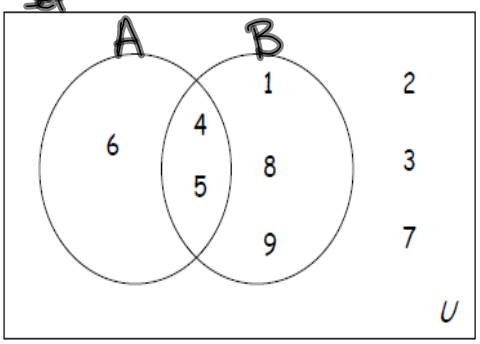
. Use the Venn Diagram below to list the elements of each set.



Set

∪ = union "and"

∩ = intersection "overlap"

P(or)

P(A ∪ B)

a. A — 4,5,6

b. B^c - complement "c" means NOT "B" — 6,2,3,7

c. A∪B — 1,4,5,6,8,9

d. A∩B ↳ in common — 4,5

e. $(A \cup B)^c$ — 2,3,7

Intersection and Union Practice

Let A = {2,4,6,8,10,12,14,116,18,20}
Let B = {1,3,4,5,6,7,9,11}
Let C = the set of natural numbers less than 10
Let D = the set of even whole numbers between 2 and 12, inclusive

1,2,3,4,5,6,7,8,9

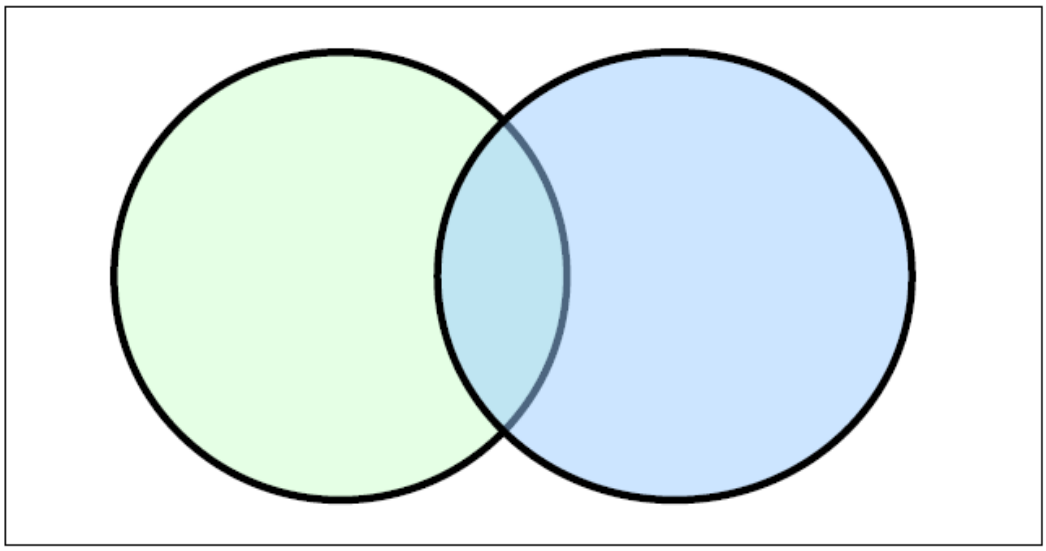
2,4,6,8,10,12

1. Find A U B — union — {1,2,3,4,5,6,7,8,9,10,11,12,14,116,18,20}
2. Find A ∩ B — intersection — {4,6}
3. Find C ∩ D — in common — {2,4,6,8}
4. Find D ∩ C — {1,2,3,4,5,6,7,8,9,10,12}
5. Find (B ∩ C) ∪ D — {1,3,4,5,6,7,9}
6. Find (A ∪ C) ∩ B

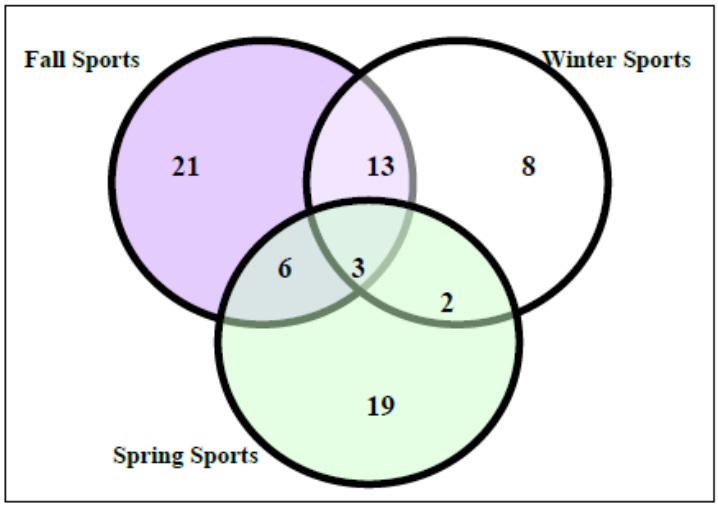
Organize the data into the circles.

Factors of 64: 1, 2, 4, 8, 16, 32, 64

Factors of 24: 1, 2, 3, 4, 6, 8, 12, 24



Answer Questions about the diagram below



1) How many students play sports year-round?
2) How many students play sports in the spring and fall?
3) How many students play sports in the winter and fall?
4) How many students play sports in the winter and spring?
5) How many students play only one sport?
6) How many students play at least two sports?