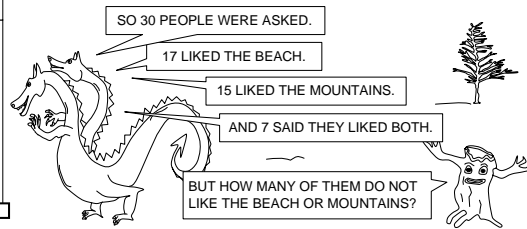


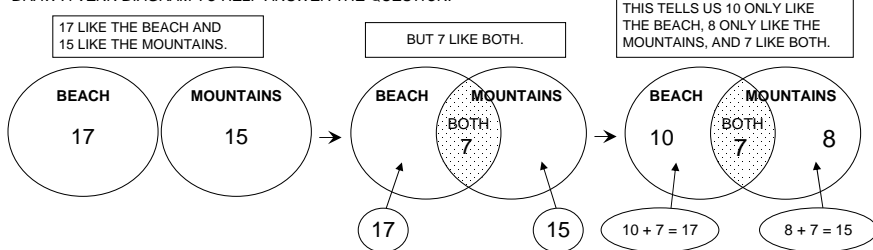
VENN DIAGRAMS - A

HELPFUL EXAMPLE

THIRTY PEOPLE WERE ASKED IF THEY LIKE THE BEACH OR THE MOUNTAINS. SEVENTEEN SAID THEY LIKED THE BEACH, FIFTEEN SAID THEY LIKED THE MOUNTAINS, AND SEVEN LIKED BOTH. HOW MANY DID NOT LIKE THE BEACH OR THE MOUNTAINS?



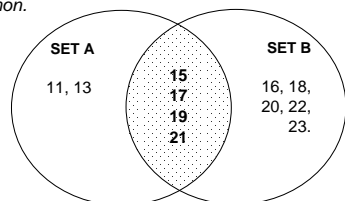
DRAW A VENN DIAGRAM TO HELP ANSWER THE QUESTION.



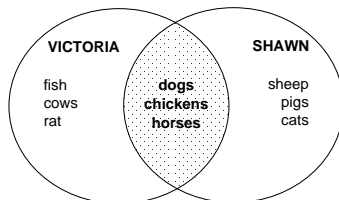
ANSWER: $10 + 7 + 8 = 25$, SO 30 PEOPLE - 25 PEOPLE = 5 PEOPLE DO NOT LIKE EITHER.

NOW YOUR TURN. USE VENN DIAGRAMS TO SOLVE THE PROBLEMS BELOW.

1. You have two sets of numbers. Set A includes all odd numbers between 10 and 22 and Set B includes all whole numbers from 15 to 23. If you draw a Venn Diagram, what numbers will be in the intersection? *The set of numbers they have in common.*

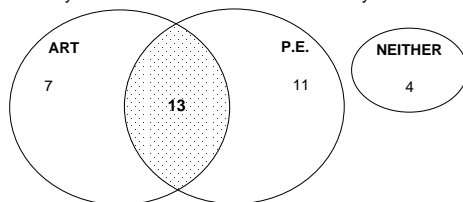


2. Victoria and Shawn both live on farms. Victoria has dogs, fish, cows, horses, chickens, and a pet rat. Shawn has horses, sheep, chickens, dogs, pigs, and cats. Draw a Venn Diagram representing the two sets.



3. A class was asked which subject did they like more, art or physical education. 20 of the students liked art, 24 liked P.E., 13 of them liked both, and 4 said they did not like either of them. How many students are in the class?

$$7 + 11 + 13 + 4 = 35$$



ANSWERS - PAGE 1

VENN DIAGRAMS - B

ANSWERS - PAGE 2

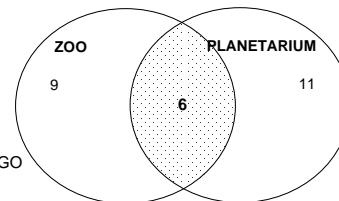
USE A VENN DIAGRAM TO SOLVE EACH PROBLEM.

1. In Barbara's class, 15 students want to go on a field trip to the zoo and 17 children want to go to the planetarium. If there are 26 students in the class and 6 of them want to do both, how many did not want to go on a field trip?

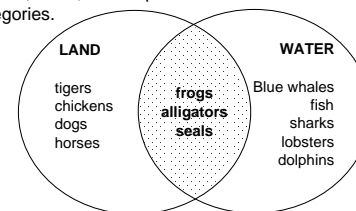
$$9 + 11 + 6 = 26$$

$$26 - 26 = 0$$

0 STUDENTS DID NOT WANT TO GO



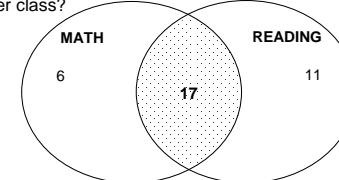
2. Create a Venn Diagram for the following animals: Blue whales, tigers, chickens, fish, dogs, frogs, sharks, lobsters, alligators, horses, seals, and dolphins. Use *animals that live on land* and *animals that live in water* as your categories.



3. During winter vacation Miss Daniels assigned math and reading homework to her class. 17 of the students completed both assignments, 23 students finished the math, and 28 of them read. If 5 of them did neither of the assignments, how many students are in her class?

$$9 + 11 + 6 + 5 = 31$$

SHE HAS 31 STUDENTS IN HER CLASS.

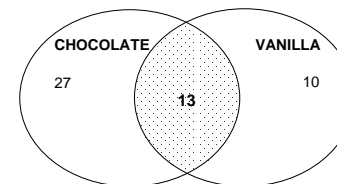


4. Fifty-nine adults were asked if they like chocolate or vanilla milkshakes. Forty said chocolate, twenty-three said vanilla, and thirteen said they liked both flavors. How many do not like either flavor?

$$27 + 10 + 13 = 50$$

$$59 - 50 = 9$$

9 LIKED NEITHER FLAVOR



5. Even though Vern and Carol are on different teams, they practice basketball together everyday. Vern's team has to play Seaside, West High, Pacific, Boonstown, York, Sandways, Victorville, and Big East. Carol's team has to play Big North, Boonstown, Yorkville, Pacific, West Town, Seaside, Long Cliff, and York. Create a Venn Diagram showing the two sets.

