

Geometry

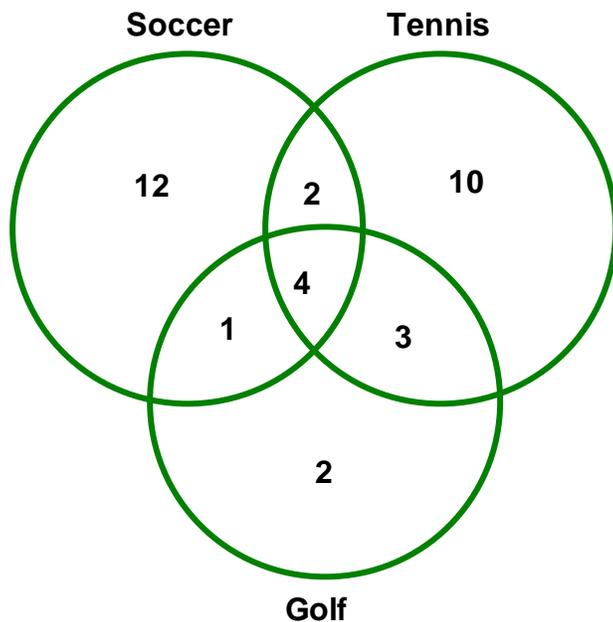
2-4 Venn diagrams

Name: _____

Time Start: _____ Finish: _____

Total Time = _____

Consider the Venn diagram below.



- _____ 1. How many kids are on the golf team?
- _____ 2. How many kids play just golf and nothing else?
- _____ 3. How many kids are on the soccer team and on the tennis team?
- _____ 4. How many kids are on the golf team and on the tennis team?
- _____ 5. How many kids play just tennis and nothing else?
- _____ 6. How many kids are a member of all three teams?
- _____ 7. How many kids are on the tennis team?

- _____ 8. 20 kids are on the basketball team and there are 14 kids on the hockey team. If there are a total of 6 kids who are on both the basketball team and the hockey team, how many total kids are on both teams? (Draw a Venn diagram to help.)

- _____ 9. 4 kids are on both the chess team and the bowling team. If there are a total of 10 kids on the chess team and a total of 24 kids who are on the chess team or bowling team, how many kids are on the bowling team? (Draw a Venn diagram to help.)

Figure 1

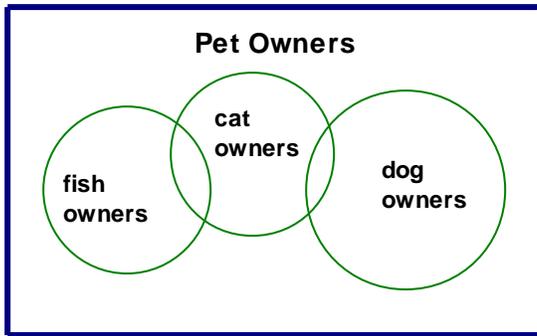


Figure 2

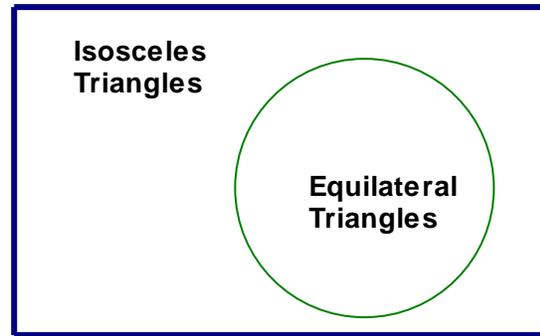
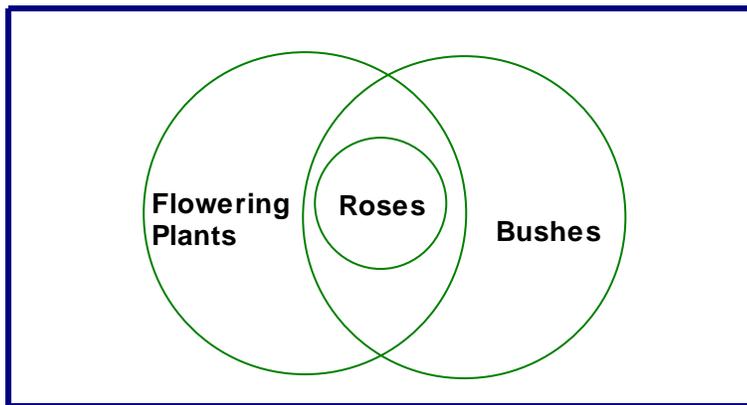


Figure 3



- _____ 10. In Figure 1 above, which is a valid conclusion? (2004 SOL question)
- A. No cat owners also own dogs.
 - B. No dog owners also own fish.
 - C. No fish owners also own cats.
 - D. No pet owner owns more than one pet.
- _____ 11. In Figure 2 above, which statement is true? (2005 SOL question)
- A. All isosceles triangles are also equilateral triangles.
 - B. All equilateral triangles are also isosceles triangles.
 - C. Some equilateral triangles are also isosceles triangles.
 - D. No isosceles triangles are equilateral triangles.
- _____ 12. In Figure 3 above, which statement is true? (2008 SOL question)
- A. No bushes are flowering plants.
 - B. No roses are bushes.
 - C. Some roses are not flowering plants.
 - D. Some flowering plants are bushes.