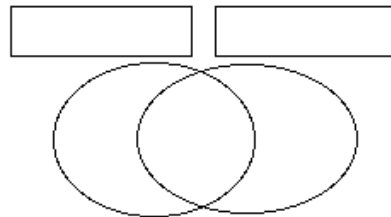


1. You have a page with an almost-complete set of Yekktis. No two Yekktis are exactly the same, and they all follow the same patterns. There are 3 missing Yekktis. Figure out what they look like, and sketch them here (note, there are patterns in the Yekkti's, like in a deck of cards. It's a very specific 3 that are missing):

2. An attribute is something that describes something (a property that it has; for example, having a temperature of about 98.6 is an attribute that most people have when they are healthy, so you could make a set of all of the people with a temperature in the normal range). List the attributes that Yekkti's have. I have started the list for you:

1. Circle eyes
- 2.

3. Play the Yekktis game at least 2 times with a friend. You will need the Yekktis cards, all of the attributes written on cards, and a large overlapping 2-circle Venn Diagram. Check here when you have finished:



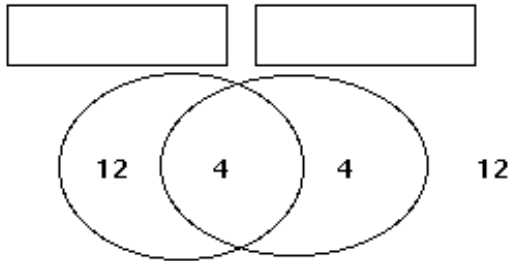
The Yekktis game:

- Choose 2 attributes cards, look at them, and lay them face down next to the Venn diagrams circles as shown to the right.
- Your partner chooses a Yekkti card and asks you where it goes, and then places it in the right section of the Venn diagram
- When your partner thinks he or she has figured out what the label is on a circle, he or she should test his or her guess by choosing a card and asking if it goes in a particular section of the diagram (you should confirm or correct you partner's guess)
- When your partner has figured out what the labels are and tested their guesses enough that they are sure they are correct, they should tell what they have figured out that the attributes are. If they are correct, turn over the attribute cards, and clean up the cards for the next game.

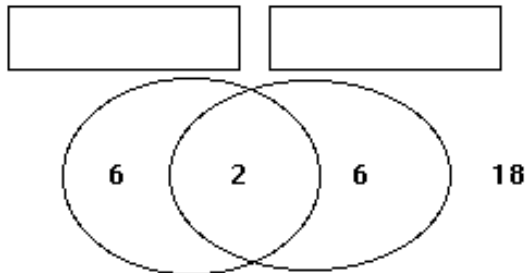
- Switch roles for the next game.

4. Fill in attributes so that the number of cards in each region when completely filled in will be as shown:

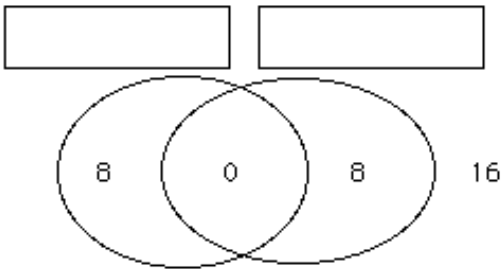
a.



b.



c.



5. Fill in the table to show several more ways of getting the situation in 4c.

<u>triangle shaped</u>	_____
_____	<u>two antennae</u>
_____	_____
_____	_____

What sorts of attributes make the two sets have an empty intersection (as in 4c)?

Notes: The Yekkti's cards and the game in #3 are taken from the grade 2 text: *Does it Walk, Crawl or Swim* from the text book series: Investigations in Number, Data and Space. This assignment is used to teach about attributes of objects, sets and Venn diagrams, and problem solving. According to the accompanying story in the book, the Yekkti cards show pictures of strange creatures (aliens?) discovered, and drawn by some children.