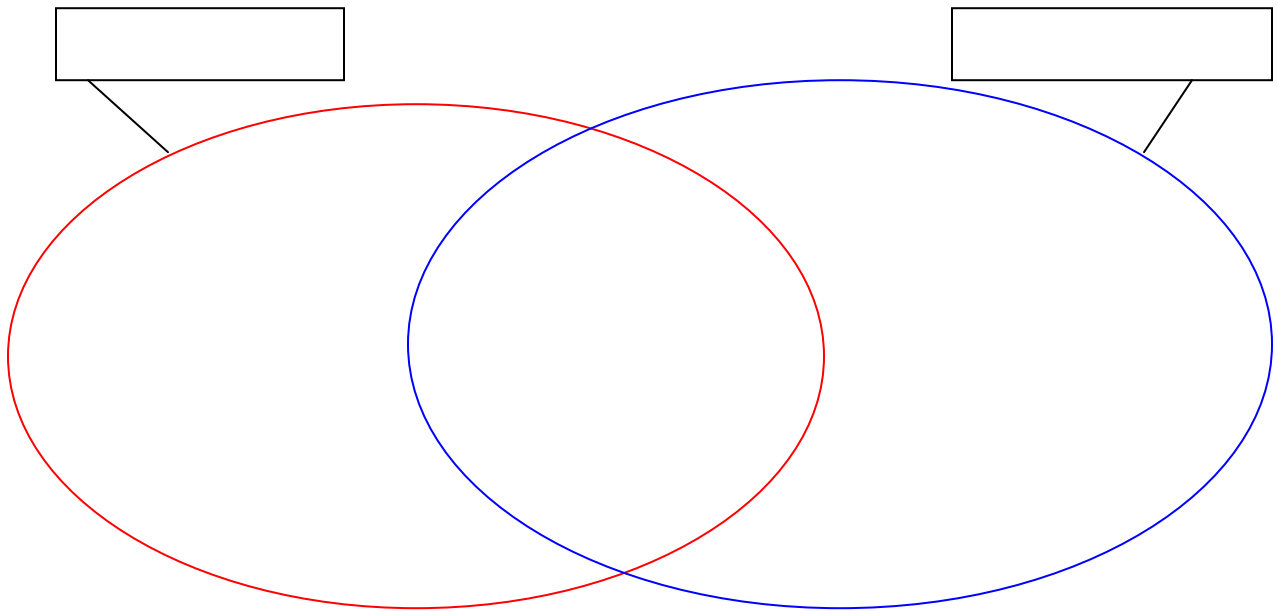
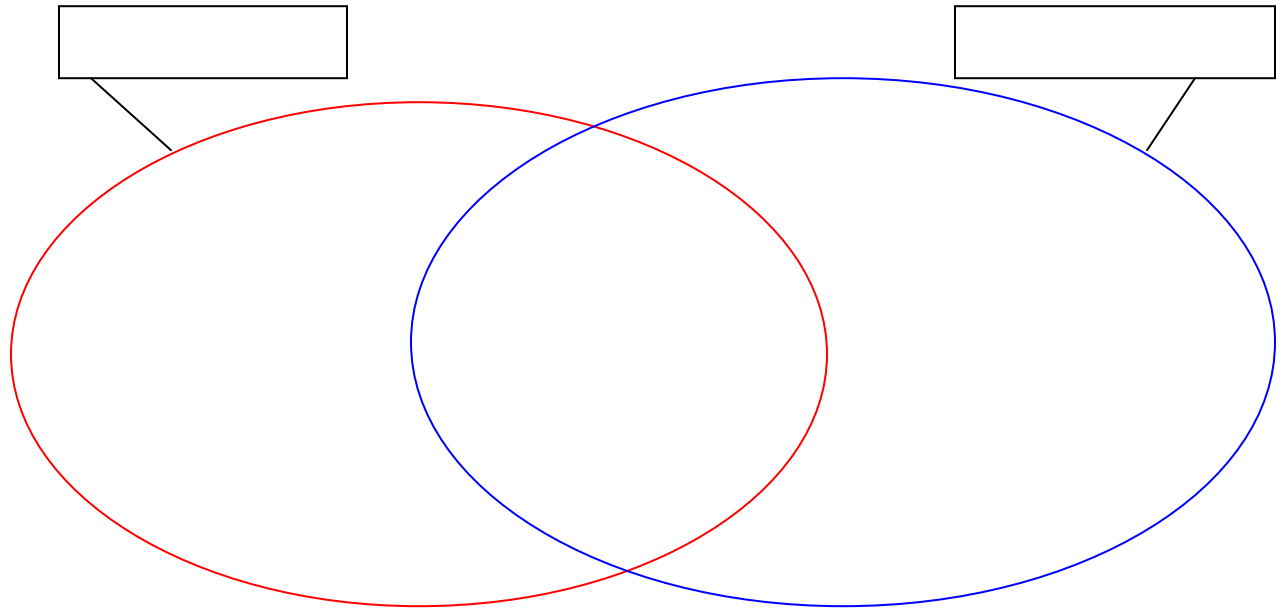


Possible Labels for “Guess My Rule” with Numbers

The RED tag is one of these:	The BLUE tag is one of these:
Multiples of 2	Multiples of 2
Multiples of 3	Multiples of 3
Multiples of 4	Multiples of 4
Multiples of 5	Multiples of 5
Multiples of 10	Multiples of 10
Odd Numbers	Odd Numbers
Positive Prime Numbers	Positive Prime Numbers
Larger than 50	Larger than 50
Smaller than 50	Smaller than 50
Positive Divisors of 12	Positive Divisors of 12
Positive Divisors of 18	Positive Divisors of 18
Positive Divisors of 20	Positive Divisors of 20
Positive Divisors of 24	Positive Divisors of 24
Positive Divisors of 30	Positive Divisors of 30

The RED tag is one of these:	The BLUE tag is one of these:
Multiples of 2	Multiples of 2
Multiples of 3	Multiples of 3
Multiples of 4	Multiples of 4
Multiples of 5	Multiples of 5
Multiples of 10	Multiples of 10
Odd Numbers	Odd Numbers
Positive Prime Numbers	Positive Prime Numbers
Larger than 50	Larger than 50
Smaller than 50	Smaller than 50
Positive Divisors of 12	Positive Divisors of 12
Positive Divisors of 18	Positive Divisors of 18
Positive Divisors of 20	Positive Divisors of 20
Positive Divisors of 24	Positive Divisors of 24
Positive Divisors of 30	Positive Divisors of 30

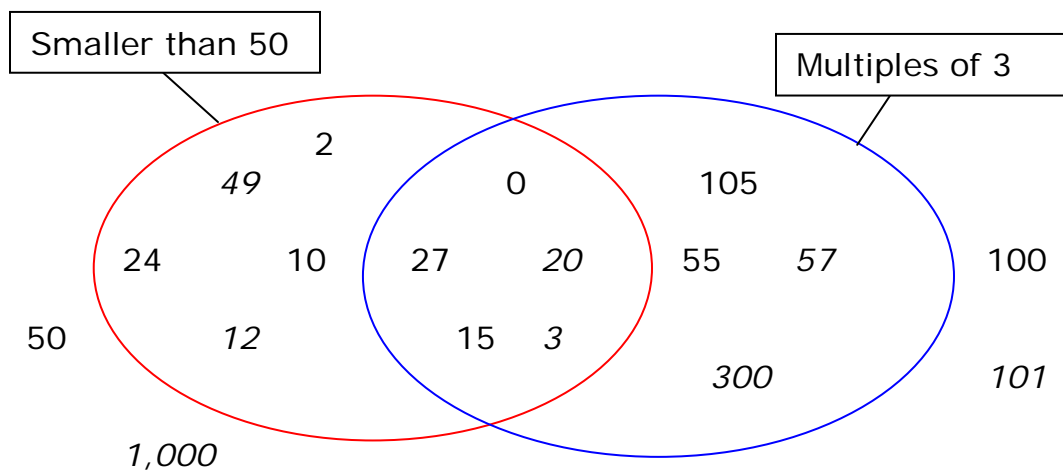


Numerical Guess My Rule

Getting Ready:

Prepare the number cards cut from Handout page ?. Put magnetic tape on the back of each if your board is magnetic or tape, if not.

Draw this Venn Diagram on the board, using red chalk or marker for the left ring and blue for the right. Ask students to locate 27, 10, 55, 105, 15, 50, 100, 0, and 2 in the diagram. Then ask for two or three more numbers for each section of the diagram (left, right, intersection, and outside). The result should look similar to this: (Additional numbers are in italics.)



Tell the students that you will divide the class into teams and play Guess My Rule. Give each child a copy of the possible labels for the rings. Choose two categories and place their labels face down by each ring. Place number cards into two groups, one for Team A and one for Team B, being sure that each team has some cards that fit each section. Then place at least one piece from each team in the Venn diagram, eliminating the need for the first players to operate purely on guesswork. Before the actual game begins, have each team work together to cross out labels that can be eliminated given the clues the numbers you have placed provide.

Object of the Game:

Each team tries to place all of its game pieces correctly (according to the face-down label cards) in the Venn diagram. The winning team is the one that is first to place all of its game pieces correctly and that identifies the face-down cards correctly (after playing according to the following rules.)

Rules of the Game:

- The teams alternate turns, and the members take turns within each team. The team may talk within their group about which piece to place and where, but once the member who will place the piece goes to the board, the group can no longer communicate with that person, or that turn is forfeit.
- You are the judge. If the piece is correctly placed, say "yes." The piece remains in the diagram and the player immediately has a chance to place another piece with no help from his/her team. (The second move may have been discussed by the team before the member comes to the board initially.) Only one extra turn is allowed per correctly placed piece. If the piece is incorrectly placed, say "no." The player returns the piece to the team's unplayed collection and play passes to the other team. (Be sure the children understand that attempts resulting in a "no" can still give them valuable information.)
- As play continues, the group should work together to eliminate labels for each ring on the record sheet, given the clues that each newly placed number (or a "no" response) provides.
- As an aid in judging, prepare a sheet showing the correct position of each game piece. (This is very, very important!) If at any time you discover that you have made an error, say so immediately and rectify the mistake. Either move an incorrectly placed piece whose position you had approved to its correct region or replace a correctly placed piece that has been rejected.
- When a team has correctly placed all of its pieces, the player who placed the last piece may then attempt to identify each of the labels. The labels can only be identified by a team after all its pieces have been played. If both labels are correctly identified, the team has won. If one or both labels are incorrect, simply say that the identification is incorrect and let the game continue. Be sure that the children understand that a "no" here means that only one label may be incorrect or both may be incorrect. The team may try to identify the labels again in its next turn.

Number Cards for Numerical Guess My Rule

0	1	2	3
4	5	6	7
8	9	10	12
15	18	20	24
27	40	45	50
60	99	100	105

