

USE LOGICAL REASONING



This strategy is really used for all problem solving. In many ways students use this strategy category as a catch-all because these strategies are not usually used on their own but in combination with other strategies mentioned above. In addition, it also touches on the strategy of elimination, which is commonly used by people in everyday life. In problem solving context, students must list and eliminate possible solutions based upon information presented in the problem.

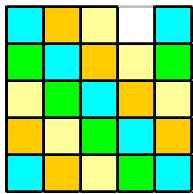
Example 1:

I have 3 in the ones place. I am greater than 20 but less than 29. What number am I?

Since I am greater than 20 and less than 29, my first digit must be 2. And since 3 is in my ones place, I must be 23.

Example 2:

What color is needed to complete the pattern below?



Students can use a combination of looking for patterns and their logical reasoning to solve the problem. Green is needed to complete the pattern.

Example 3:

The farmer feeds all of his animals in the same order each afternoon. Use the clues below to determine his daily order.

- The chickens were fed before the pigs, but after the cows.
- The goats were fed right after the cows.
- The horses were fed after the pigs.

To determine the feeding order, students may start with the information that is known (the goats are fed directly after the cows) and use the clues to finish the ordered list. The farmer daily order is cows, goats, chicks, pigs and horses.