

CHAPTER-3 | Number Play

QUIZ PART-14

1. In the given table, a supercell is a number that is
- smaller than all neighbours
 - greater than all neighbours
 - equal to all neighbours
 - always even

(B)

Explanation: A supercell is greater than all the numbers in its neighbouring cells.

2. Which of the following is a palindrome?
- 123
 - 4554
 - 678
 - 2351

(B)

Explanation: 4554 reads the same from left to right and right to left.

3. What is the Kaprekar constant for 4-digit numbers in this chapter?
- 495
 - 5085
 - 6174
 - 9999

(C)

Explanation: The chapter states that 6174 is the Kaprekar constant.

4. In the Collatz rule, if a number is odd, we
- divide it by 2
 - add 2
 - multiply by 3 and add 1
 - subtract 1

(C)

Explanation: For an odd number, the rule is $3n + 1$.

5. How many rounds does 5683 take to reach 6174?
- 5
 - 6
 - 7
 - 8

(C)

Explanation: The sequence shown reaches 6174 in 7 rounds.

6. Which of the following is a correct example of two 4-digit numbers adding to a 4-digit number?
- $5642 + 1456 = 7098$
 - $5642 + 4456 = 10098$
 - $9000 + 2000 = 11000$
 - $9999 + 1 = 10000$

(A)

Explanation: 7098 is still a 4-digit number.

7. On the first number line, the number just before 305 is
- 295
 - 300
 - 310
 - 315

(B)

Explanation: The pattern goes 290, 295, 300, 305, 310, 315, 320.

8. On the second number line, the number just after 2002 is
- 2001
 - 2002
 - 2003
 - 2004

(C)

Explanation: The numbers increase by 1: 1998, 1999, 2000, 2001, 2002, 2003, 2004.

9. Which is the largest 3-digit number whose digit sum is 15?
- 780
 - 870
 - 960
 - 888

(B)

Explanation: $8 + 7 + 0 = 15$, and 870 is the largest such 3-digit number given in the chapter.

10. What is the sum of the largest and smallest 3-digit numbers?
- 1000
 - 1099
 - 1100
 - 999

(B)

Explanation: Largest 3-digit number = 999, smallest 3-digit number = 100, so $999 + 100 = 1099$. This