NUMBERS (CONTD)

1. If X candies are divided among 6 girls, each gets an equal number of candies. Find X, if it is a perfect cube and is divisible by first 3 perfect squares.
2. 8 ³
3. 5 ³
4. **6 ³**
5. 7 ³
6. If a four digit number 7m6m is divisible by 11, what is the max number of values that p could take?
7. **1**
8. 2
9. 3
10. 4
11. If m² is a perfect cube, which of the following statements is always true?
12. m is even
13. m is odd
14. m³ is a perfect square
15. **m is a perfect cube**
16. If p and q are consecutive positive integers, then how many pairs of values of p and q is

(p + q)< 100?

1. 24
2. **49**
3. 48
4. 50
5. If six digit number 1457b9 is divisible by 3, which of the following cannot be equal to b?
6. 1
7. 4
8. 7
9. **5**
10. What is the negative integer which is less than one eighth of its square by six?
11. 12
12. **4**
13. 16
14. 24
15. Which of the following numbers is exactly divisible by all prime numbers between ten and twenty?
16. 75,294
17. **92,378**
18. 35,274
19. 48,391
20. 7, 21, and 49 min are the intervals at which four bells toll. If they toll together at 11:24

Am, when will they toll together for first time after that?

1. 11:56 Am
2. **12:13 Pm**
3. 01:43 Pm
4. 11:48 Am
5. How many numbers lying between 700 and 900 leave a remainder 4 when divided by 9, 15, 18?
6. 5
7. 4
8. 3
9. **2**
10. If the sum of two 3-digit numbers 38p and 8q2 is 1258, what is sum of (p + q)?
11. 11
12. **13**
13. 17
14. 15
15. If a, b, c and d are consecutive odd numbers, then (a ²+ b ²+ c² + d²) is always divisible by:
16. 7
17. 5
18. 3
19. **4**
20. If a 3 digit number has only 2 factors (other than one and itself) both of which are co-primes. How many such numbers are possible?
21. Only 2
22. Only 1
23. Only 3
24. **More than 3**
25. If (p ^ a) x (q ^ b) x (c ^ r) is a perfect cube, ten what can be said about a, b, c?
26. Multiples of 2
27. Are co- prime
28. **Multiples of 3**
29. Are twin prime
30. The difference between the largest and the smallest prime numbers below 100 is a multiple of two prime numbers. What is the sum of these two prime numbers?
31. 22
32. 21
33. 23
34. **24**
35. What is the difference between the sum of cubes and that of squares of the first ten natural numbers?
36. 4130
37. 3820
38. **2640**
39. 5280