Remainders, factorials and unit digit of high-power value

13. If the sum of all integers between 1 to 200 which are divisible by 16 and 5 are divided by 7, then what will be the remainder?

A. 5 B. 3 C. 4 D. 2

14. The largest number which divides 70 and 125, leaving remainders 5 and 8 respectively is:

A. 11 B. 12 C. 13 D. 16

15. What will be the remainder if 2^{256} divided by 17?

A. 1 B. 2 C. 3 D. 5

16. What will be the remainder if 568! Divided by 569?

A.568 B.567 C.555 D.569

17. What will be the remainder if 225! divided by 227?

A.0 B. 1 C. 2 D. 3

20. Find the remainder when 24^{16} is divided by 17?

A. 0 B. 2 C.3 D. 1

21. What will be the remainder if 29^{631} divided by 10?

A. 7 B. 8 C. 1 D. 9

22. What will be the unit digit if 279 x 265 x 369?

A. 1 B. 4 C. 3 D. 5

23. What will be the unit digit of 62^{54} x 23^{62}?

A.4 B.5 C. 6 D.7

24. What is the unit digit if 49^{865} x 25^{48} x 26^{88} x 2^{154}

A.0 B. 1 C. 2 D. 3

25. What will be the remainder if 97! divided by 10

A. 0 B. 2 C. 3 D. 1

26. The divisor is 10 times the quotient and 4 times the remainder. If the quotient is 20, the dividend is

A. 4050 B. 4480 C.4000 D. 4250

27. The divisor is 20 times the quotient and 5 times the remainder. If the quotient is 13, the dividend is

A. 3432 B. 3662 C.2785 D. 3879

28. The divisor is 15 times the quotient and 12 times the remainder. If the quotient is 12, the dividend is

A.2247 B.2052 C. 1568 D. 2175

29. If a number is divisible by 29 its negative remainder is 17, then what will be the positive remainder?

A.11 B.12 C.15 D.16

30. If a number divided by 32 leaves negative remainder of 12 and quotient 11, then what will be that number?

A. 330 B.340 C.364 D. 352

31. If a number divided by 153 leaves remainder 15, what will be the remainder if the same number divided by 9?

A. 7 B. 6 C.5 D. 8

32. What will be the remainder if 22^{52} x 152 divided by 23?

A.14 B.22 C.19 D.15

33. What will be the sum of remainders if 120*123*124 divided by 121?

A. 7 B. 8 C. 5 D. 4

34. What will be the remainder if $(34!)^2$ divided by 69?

A. 1 B. 0 C. 2 D. 3

35. What will be the remainder if 3^{342} divided by 28?

A. 1 B. 2 C. 3 D. 5

36. What will be the remainder if 8^{144} divided by 65?

A. 1 B. 2 C. 3 D. 5

37. What will be the unit digit for 1024^{58} x 2^{56} $x4^{87}$ x 99^{145}?

A. 4 B. 5 C.6 D. 7

38. What will be the remainder if 3^{348} divided by 27?

A.1 B. 0 C.2 D.3

39. If a number divided by 203 leaves remainder 22, what will be the remainder if the same number divided by 7?

A.1 B.2 C.3 D.4

40. The divisor is 18 times the quotient and 6 times the remainder. If the quotient is 13, the dividend is

A.2247 B.1052 C. 3120 D. 3081

41. What will be the sum of the unit digits of 16^{54}, 15^{68} and 19^{96}

A.12 B.11 C.13 D.16

42. What will be the ratio of the unit digits of 267^{58} and 53^{89}?

A.2:1 B.3:1 C.1:3 D. 4:1

43. What will be the remainder if 57^{52} x 412 divided by 58?

A.4 B.5 C.6 D.8

44. What will be the remainder if 31^{144} x 1532 divided by 15?

A. 2 B.1 C.4 D.6

45.What is the unit digit for 27^{92} +26^{48}+24^{48} -25^{69}

A.7 B.8 C.9 D.6

46. What is the unit digit for the sum of first 49 whole numbers?

A. 0 B. 1 C. 2 D. 4

47. If a+1/a = 1/7 of 49, what will be the unit digit for a^2+1/a^2?

A. 3 B. 4 C. 7 D. 5