17. Set S contains all integers from 100 to 200, exclusive.

Quantity A: The number of integers in set S that are multiples of 5 but not multiples of 4

Quantity B: 15

A. Quantity A is greater.

B. Quantity B is greater.

C. The two quantities are equal.

D. The relationship cannot be determined from the information given

18. Set S consists all the integers（between 1 and 1000 inclusive） that are divisible by 3, then how many integers in set S are not divisible by 5?

19. If an integer is randomly selected from integers between 100 and 1000 inclusive, what’s the probability that the number is divisible by 7?

Give your answer as a fraction.

20. The square of which of the following number is 4 more than a multiple of 5?

Indicate ***all*** such values.

A. -8

B. 5

C. $\sqrt{17}$

D. $\sqrt{19}$

21. What's the number of n that are either multiples of 5 or multiples of 7 from 1 to 1000, inclusive?

A. 312

B. 313

C. 314

D. 315

E. 316

22. Which of the following could be the value of x to make sure that x^3-x is divisible by 10?

Indicate ***all*** such values.

A. 480

B. 481

C. 485

D. 680

E. 687

23. If $x=10^6-1$, which of the following is not the factor of x?

A. 7

B. 9

C. 11

D. 19

E. 111

24. If the tens digit and units digit of a three-digit integer N is x and y, respectively, then (N-100x-y) must be a multiple of which of the following integers?

Indicate ***all*** such values.

A. 2

B. 3

C. 4

D. 5

E. 6

25. The remainder is 10 when the sum of a positive integer n and 11 is divided by 12.

Quantity A: n

Quantity B:11

A. Quantity A is greater.

B. Quantity B is greater.

C. The two quantities are equal.

D. The relationship cannot be determined from the information given.

26. If n is an integer and 100<n<200, what is the number of n such that the remainder is 4 when n is divided by 9?

27. x is a positive integer

Quantity A: The remainder when（x+1）(x+2)（x+3）is divided by 5

Quantity B：1

A. Quantity A is greater

B. Quantity B is greater

C. The two quantities are equal

D. The relationship cannot be determined from the information given

28. If now the hour hand is at 4, then after 1196 hours, what number will the hour hand be at?

A. 8

B. 9

C. 10

D. 11

E. 12

29. The remainder is 4 when a positive integer k is divided by 6.What is the remainder when 8k is divided by 6?

30. Positive integer n is between 44 and 53, inclusive. The remainder is 2 when n is divided by 3， and the remainder is 1 when n is divided by 4. What is the value of n?

31. If n is a positive integer less than 1000 and is divisible by 50, which of the following statement alone is sufficient to verify the number n?

Indicate all such statement.

A. n is divisible by 60.

B. n is divisible by 90.

C. n is divisible by 180.

32. Train A passes by a certain station every 12 minutes, while Train B passes by the same station every 20 minutes. If train A and train B pass by the station for the first time between 06:00 AM and 07:00 AM (inclusive), for how many times can these two trains pass by the station at the same time from 06:00AM to 10:30AM in the same day? Indicate all such values.

A. 0

B. 1

C. 2

D. 3

E. 4

F. 5

G. 6