

# Quantitative Aptitude



If the sum of two numbers is 27 and the HCF and LCM are 3 and 60 respectively, then the sum of the reciprocal of the two numbers is :

- A.  $1/10$
- B.  $1/5$
- C.  $3/10$
- D.  $3/20$



The LCM of two numbers is 35322. If the numbers are in the ratio 1:3 then their HCF is :

- A. 11774
- B. 35322
- C. 23542
- D. 58870



Simplify  $(\frac{3}{7} + 22\frac{4}{7} - \frac{2}{8})$   
divided by  $\frac{1}{4}$ .

- A. 22
- B. 21
- C.  $3\frac{2}{7}$
- D.  $3\frac{3}{7}$



What is the value of  ${}_{15}C_{13}$ ?

- A. 30
- B. 15
- C. 210
- D. 105



Which number should be multiplied by 43 so that it will have 3 prime factors?

- A. 2
- B. 3
- C. 6
- D. 8



Log 3600 is equal to:

- A.  $2 \log 6 + 1$
- B.  $6 \log 2 + 1$
- C.  $2 \log 6 + 2$
- D.  $6 \log 2 + 2$



What is the square root of  $7\frac{1}{2}$ , when it is expressed as a mixed fraction?

- A.  $49\frac{1}{2}$
- B.  $49\frac{1}{4}$
- C.  $56\frac{1}{4}$
- D.  $14\frac{1}{3}$





Find the number to be multiplied by  $(-6)^{-1}$ , so as to get  $(-8)^{-1}$  as the product?

- A.  $\frac{3}{4}$
- B.  $-(\frac{3}{4})$
- C.  $\frac{4}{3}$
- D.  $-(\frac{4}{3})$



What is the value of  $\text{antilog}_{10} 100$ ?

- A. 2
- B.  $10^{100}$
- C. 100
- D. 10



If LCM and HCF of 2 numbers are 162 and 9 respectively. Prime factors of the product of the two numbers are:



A company hired 35 new employees and categorised them as per their joining dates. 21 had joined before 28.02.2012 and 14 had joined after 28.02.2012. The new joiners were called for a meeting to discuss any problem they faced at the workplace. 3 representatives were chosen randomly to speak on behalf of the rest. What is the probability of selecting 2 employees who had joined before 28.02.2012 and 1 after 28.02.2012?

- A.  $546/935$
- B.  $84/187$
- C.  $252/2431$
- D.  $126/2431$



If  $xy = x^x$ , then  $1/(\log_x(y)+1) =$



What are the number of ways of arranging 9 books out of 14 in a library where the librarian, while arranging the books, got 2 damaged books and sent them for rebinding and repairing?

- A.  ${}^{12}C_4$
- B.  ${}^{12}P_9$
- C.  ${}^{14}C_7$
- D.  ${}^{14}P_7$



Find the value of  $\log(\sqrt{64})\log 8$ .

- A. 1
- B. 2
- C. 8
- D. 16



Which of the given logarithmic expression is NOT possible?

- A.  $\log_5 7$
- B.  $\log_{10} 1$
- C.  $\log_5 -7$
- D.  $\log_5 (1/5)$
- E.  $\log_{10} e$





If  $7^3$ ,  $2^7$  and  $9^3$  are factors of a number denoted by  $(a * 2^6 * 91 * 81)$ , then what is the smallest possible value of  $a$ ?



$\log_{16} 64 - \log_{64} 16$  is equal to:

A.  $\frac{2}{3}$

B.  $\frac{5}{6}$

C.  $\frac{3}{2}$

D.  $\frac{6}{5}$



Out of 5 men and 3 women, a committee of 4 member is to be formed. In how many ways can it be done if the committee includes at least one woman?



The value of  $\log_{abc} a^2 b^2 c^2$  is:

- A.  $abc$
- B.  $ab$
- C. 1
- D. 2



What is the value of  $(5^{-2} \times 10^{-4}) / (2^{-5} \times 5^{-6})$



An investment earns 4 paisa per rupee invested. if at the end of the year, the interest earned by an investment is Rs.100,then the investment is equal to?

- A. Rs. 2000
- B. Rs. 2200
- C. Rs. 1000
- D. Rs. 2300
- E. Rs. 2400



If  $\log_x(1/343) = -3$ , then the value of  $x$  is equal to:



If LCM and HCF of two numbers are 294 and 49 respectively, product of 2 numbers can be expressed as:

- A.  $2 \times 3 \times 7^4$
- B.  $2^2 \times 3^2 \times 7^2$
- C.  $2^4 \times 3^2 \times 7$
- D.  $2^2 \times 3^4 \times 7$





In how many ways sangeeta aarti pooja mona and payal can stand in a queue?

- A. 120
- B. 5
- C. 20
- D. 150



Length and breadth of a rectangle are directly proportional.

If length increases from 6 cm to 21 cm and if breadth now is 14 cm, then, what was the breadth before any change in length occurred?

- A. 4 cm
- B. 1.5cm
- C. 2cm
- D. 3cm

