

# Mathematics Entry Test Preparation

Posted by Muneer Hayat On 28 September 2014, 11:31 am

## Mathematics Entry Test Preparation

5/8 % is equal to what?

- A. 0.5/8 B. 1/160  
C. 1/200 D. 1/800

2. 0.036 in terms of percent is:

- A. 36% B. 6.36%  
C. 3.60% D. 360%

45% of 600 is equal to:

- A. 300 B. 270  
C. 350 D. 250

What is 1/5% of 6000?

- A. 120 B. 12  
C. 1200 D. 500

What percent of 3/5 is 3/10?

- A. 25% B. 20%  
C. 60% D. 50%

What is 5% of 20%?

- A. 1% B. 10%  
C. 100% D. 0.10%

What percent of 3.5 kg is 70 gram?

- A. 20% B. ?2%  
C. 0.20% D. 200%

What will be 60% of a number whose 80% is 320?

- A. 240 B. 450  
C. 500 D. 600

550 after a decrease of 70% is:

- A. 400 B. 385  
C. 450 D. 165

10. After an increase of 28% 825 is equal to what?

- A. 956 B. 1056  
C. 1200 D. 960

If y% of x is 29 then value of y is.

- A. 2900 B.  $xy/100$   
C.  $2900/x$  D.  $29y$   
E.  $xy/2900$

If x% of y is 29x then value of y is:

- A. 29y B. 2900  
C.  $29x/100$  D.  $xy/100$   
E.  $2900/xy$

If 28 out of 40 seats on a table were occupied what percents of the seats were not occupied?

- A. 15% B. 20%  
C. 30% D. 42.80%  
E. 70%

If 40% of M equals 20% of A what percent of A is M?

- A. 12% B. 200%  
C. 33 ?% D. 50%  
E. 120%

What is the percent discount on a trouser marked down from \$160 to \$120?

- A. 10% B. 20%  
C. 22 D. 25%

E. 33 %

70% of 14 is 14% of what number?

A. 30 B. 45

C. 50 D. 65

E. 70

If 80% of Z is 200. What is 70% of Z?

A. 175 B. 200

C. 900 D. 1400

E. 1750

18. If Rabias average rose from 62 to 82 by what percent did her average increase?

A. 33.33% B. 32.80%

C. 33% D. 35.00%

E. 40%

The price of a bundle of pens rose from 10 cents to 15 cents. What is the percent increase in price?

A. 30% B. 30.50%

C. 33.33% D. 35%

E. 50%

A small shop contains 25 pairs of shoes. If 20% are joggers how many are not joggers?

A. 5 B. 10

C. 15 D. 20

E. 25

## Mathematics Mcqs

Posted by Muneer Hayat on 8 August 2014, 10:30 am

Mathematics Mcqs

If an inlet pipe fills a tank in 10 hrs then part of tank filled in 1 hr.

A.	1/5	B.	1/10
C.	1/15	D.	1/8

If part of tank filled in one hour = 1/10 then time required to fill the tank.

A.	8	B.	12
C.	10	D.	15

If an inlet pipe fills a tank in 10 hrs and another inlet pipe fills the same tank in 5 hrs then time required to fill the tank when both pipes are opened.

A.	10/3	B.	3/10
C.	1/3	D.	3

If an outlet pipe empties a full tank in 20 hrs then part of tank emptied in one hour.

A.	3/20	B.	2/5
C.	1/10	D.	1/20

An inlet pipe can fill a tank in 10 hrs and an outlet pipe empties the same full tank in 20 hrs. The time required

to fill the tank when both pipes are opened.

A.	10	B.	20
C.	30	D.	25

If A can do a piece of work in 10 days then part of work done by him in one day.

A.	$\frac{2}{5}$	B.	$\frac{3}{8}$
C.	$\frac{1}{10}$	D.	$\frac{3}{7}$

If A's 1 day's work =  $\frac{1}{20}$  then time required to finish the job (in days)

A.	20	B.	10
C.	25	D.	30

If A can do a job in 10 days another person B can do the same job in 20 days then time required to do the job when both of them working together.

A.	$\frac{1}{30}$	B.	$\frac{3}{20}$
C.	$\frac{1}{10}$	D.	$\frac{2}{3}$

Alia can complete an assignment in 5 days and Babar can complete the same assignment in 20 days. The time taken by both Alia and Babar to complete the assignment working together is

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

Asghar can do a job in 60 days. And both Asghar and Babar can do the same job in 20 days working together. Babar alone can do the same job in

A.	30 days	B.	60 days
C.	28 days	D.	45 days

## Mathematics Mcqs Practice Test

Posted by [Muneer Hayat](#) on 28 June 2014, 3:56 am

## Mathematics Mcqs Practice Test

Mathematics Mcqs Practice Test

**WHAT IS THE AREA OF RECTANGULAR ROOM WITH A LENGTH OF 5-3I AND WIDTH OF 2I**

6+10i

5-i

10-i

N.O.T

**0.25 IS .....**

an irrational number

a natural number

a prime number

a rational number

**Question # 3**

**$(3^{-12})^{1/2} = \dots\dots\dots$**

$3^{-6}$

$3^6$

$3^{-12}$

$3^{12}$

**1.4142135... IS .....**

a natural number

a rational number

a prime number

a rational number

**THE ADDITIVE INVERSE OF  $2/3$  IS**

$2/3$

$-2/3$

$-3/2$

0

**ACCORDING TO ADDITION PROPERTY OF INEQUALITIES  $A+C < B+C$  IF= "" <="" H4="" >**

$a < b$

$< a$

$$a=b$$

$$a < c$$

**THE SET OF ALL NONE SINGULAR MATRICES OF ORDER 2 FROM A NONE\_ABELIAN GROUP UNDER**

Addition

Multiplication

a & b both

N.O.T

**IN  $R$ , THE ADDITIVE IDENTITY IS**

0

1

-1

none

**IF  $M$  IS A SQUARE MATRIX, WITH RATIONAL ENTITIES THEN WHICH OPERATION NOT COMMUTATIVE ON  $M$**

Addition

Subtraction

Multiplication

Both b & c

**THE LENGTH OF THE RADIUS OF THE CIRCLE  $X^2 + Y^2 = A^2$  IS**

0

a

2a

3a

**A CHORD PASSING THROUGH THE CENTRE OF THE CIRCLE IS CALLED**

the secant of the circle

the tangent of the circle

the arc of the circle

the diameter of the circle

**$(\mathbb{Z}, +)$  IS A.....?**

Groupoid

Semi-group

Monoid

A .O. T

**A NUMBER WHICH CAN BE PUT IN THE FORM  $P/Q$ , WHERE  $P, Q \in \mathbb{Z}$  AND  $Q \neq 0$  IS CALLED**

a complex number

a rational number

a natural number

an irrational number

**IF  $\cos \theta = 2/3$  AND  $\cos \theta / \tan \theta > 0$ , THEN  $\theta$  IS IN THE**

the 1st quadrant

the 3rd quadrant

the 4th quadrant

1st & 3rd quadrant

**IN  $\mathbb{R}$  THE NUMBER OF IDENTITY OF ELEMENT W.R.T.'.' IS**

one

two

three

four

# Mathematics Important Mcqs For NTS And Public Service Commission Tests

Mathematics Important Mcqs for NTS and Public Service Commission Tests

1. In the exam 45% students failed and 550 students were successful. The total number of students who appeared in the exam were:

- (a) 1000' (b) 900  
(c) 1500 (d) 800

2) A group of students volunteered to finish a construction work in 25 days. 1/4 of the students did not come and the work could be finished in 35 days. The original number of students in the group were

- (a) 25.00 (b) 32.00  
(c) 35.00 (d) 37.00

3) A man bought a flat for Rs. 8,20,000. He borrowed 55% of this money from a bank. How much money did he borrow

from the bank? .

- (a) Rs. 4,51,000' (b) Rs. 4,52,000  
(c) Fvs. 4,53,000 . (d) Rs. 4,54,000

4) A primary school had an enrollment of 850 pupils in January 1970. In January 1980 the enrollment was 1,120; What

was the percentage increase for the

enrollment?

- (a) 31.76%' (b) 33.50%  
(c) 30,65% (d) 34.76%

5) The number, whose 7% is 42, is

(a) 300 (b) 400

(c) 500 (d) **600'**

6) Which number will come next?

3. 5, 7, 10, 12, 14, 24, 26, \_\_\_\_\_

(a) 52 (b) 30

(c) **28'** (d) 48

7) Twelve men take 6 hours to finish a piece of work. After the 12 men have worked for 1 hour, the contractor decides

to call in 8 more men. How many more hours would 20 men take to complete the remaining work?

(a) 2 (b) **3'**

(c) 4 (d) 5

8) If a car is sold for Rs..50000 the profit is 17 percent, what would be profit percentage if sold for Rs. 47000.

(a) 14.85% (b) **15.98%'**

(c) 16.20% (d) 14.50%

9. Sadiq purchased a plot for Rs. 8,000. He sells the plot to Abid at a profit of 20%. Abid in turn sells that plot to Arif at a loss of 20%. The plot costs Arif.

(a) Rs. 12,000 (b) Rs. 10,000 (c) Rs. 8670 (d) **Rs. 7680'**

10. A's mother is twice as old as A's brother. A is 6 years younger than his brother but 4 years older than his sister. If A's sister is 15 his mother's age is:

(a) 40 (b) 45

(c) 42 (d) **50'**

11. If 12 years are added to  $\frac{2}{3}$  age of Rani, she will be three years older than today. What is Rani's present age?



- (a) 25                      (b) 27'  
(c) 26                      (d) 29

12. Three families, P, Q and R, share 480 kg of rice, Q receives twice as much rice as P and R receives half as much rice as Q. How much rice does family Q gets?

- (a) 220 kg                  (b) 230 kg

- (c) 240 kg'                (d) 250 kg

13. Six men working 8 hours a day earn Rs 720 per week. 8 men working 6 hours a day will earn per week

- (a) Rs. 540                  (b) Rs. 720'  
(c) Rs.960                  (d) Rs.1080

14) Price of sugar is increased by 25%. The percentage of consumption to be decreased so that there would be no increase in the expenditure is

- (a) 18%                      (b) 20 %  
(c) 22%                      (d) 24%

15. Nasir read 60 pages of a book on the first day. This was 20% more than the number of pages he read on the second day. Given that he read  $\frac{1}{6}$  of the book on the second day, find the number of pages in the book he had read.

- (a) 300'                      (b) 290  
(c) 325                      (d) 345

16. Mr. Rehraan ordered a car worth Rs.600.000 and was given a discount. Given that he paid Rs.57,0000 for his new car, calculate the percentage discount he received:

- (a) 5%                      (b) 7%  
(c) 9%                      (d) 10%

17. Which is the greatest number?

- (a)  $\frac{1}{4}$  of 236                (b)  $\frac{1}{16}$  of 1028  
(c)  $\frac{1}{9}$  of 504                d)  $\frac{1}{3}$  of 741

18. 10 men can construct a building in 40 days. How long will it take 20 men to do this work?

- (a) 20 days                (b) 30 days  
(c) 40 days                (d) 50 days

19. Rashid bought a shirt for Rs.350 and sold it Rs.300. How much loss did he get?

- (a) Rs.40                      **(b) Rs.50**  
(c) Rs.20                      (d) Rs.80

20. NASIR bought a practical copy Rs.60 and sold it Rs.40. How much loss did he get?

- (a) Rs.600                      **(b) Rs.60**  
(c) Rs.40                      (d) Rs.20

21. The number, whose 17% is 51, is

- (a) 200                      <b) 100

- (c) 300**                      (d) 210

22. A car washer can wash 8 cars in 18 minutes. At this rate how many cars can be wash, in three hours?

- (a) 13                      (b) 40

- (c) 80**                      (d) 125

23. There are four numbers. Average of the first three is 15 and that of the last three is 16. If the last number is 19 find the first number:

- (a) 16**                      (b) 18  
(c) 20                      (d) 21

24. 10 men can complete a job in 14 days. How long will it take 4 men to finish the same job if they work. at the same rate?

- (a) 33 days                      . **(b) 35 days**  
(e) 37 days                      (d) 39 days

25. A man takes 50 minutes to cover a certain distance at a speed of 6 km/hr. If he walks with a speed of 10 km/hr. he covers the same distance

- (a) 1 hour

- (c) 20 minutes

- (b) 30 minutes**

(d) 10 minutes

26. A man pays 10% of his income as income tax. If his income tax amounts to Rs.1500, what is his income?

- (a) Rs.13000      **(b) Rs.15000**  
(c) Rs.17000      (d) Rs.19000

27. A can do a piece of work in 10 days and B can do it in 15 days. The number of days required by them to finish it, working together is:

- (a) 8                      (b) 7  
(c) **6**                      (d) 4.

28. A carton contains 10 boxes, each box containing one dozen cubes. How many cartons are needed to fill 960 cubes?

- (a) 7                      (b) 8  
(c) 9                      (d) 12

29. 16 men build a house in 10 days. How much time will it take 8 men to do this work?

- (a) 25 days              **(b) 20 days**  
(c) 30 days              (d) 32 days

30. Naveed Ahmed spends Rs.400 in getting a good table and sells it at Rs.600. Find the percentage of profit?

- (a) 90%                      (b) 45%  
(c) **50%/**                      (d) 80%

31. All spends Rs.500 to get a good shirt and sells it at Rs.800. Find the percentage of Profit?

- (a) 59%                      **(b) 60%/**  
(c) 63%                      (d) 40%

32. Insert the missing number 5? 14 10 97

- (a) **18**                      (b) 16  
(c) 14                      (d) 12

33. Insert the missing number:

341 (250) 466 282 ( ) 398

- (a) 228                      (b) **232**  
(c) 226                      (d) 240

34. Insert the missing number:

7 14 10 12 14 9

- (a) **19**                      (b) 17  
(c) 14                      (d) 15

36. Insert the missing number:

172 84 40 18

- (a) **7**                              (b) 10  
(c) 12                              (d) 16

37. 20 men can construct a building in 40 days. How long will it take 10 men to do this work?

- (a) 50 days                      (b) 60 days  
(c) 70 days                      (d) **80 days**

38. A man saves Rs.500 which is 15% of his annual income. How much does he earn in one year?

- (a) 3542.50                      (b) **3333.33**  
(c) 3132.30                      (d) 3075.75

39. Muhammad Aslam bought a TV Rs.8000 and sold it Rs.7000. How much loss did he get?

- (a) **Rs.1000**                      (b) Rs.2000  
(c) Rs.3000                      (d) Rs.4000.

40. Insert the missing number:

1 3 2 \_\_\_\_\_ 3 7

(a) . 4                      (b) 8

(c) 5                      (d) 6

41. Which number will come next?

2,5,12,23,38,57,\_\_\_\_\_

(a) 69                      (b) 76

(c) 80                      (d) 84

42. Which one number will complete the following number series?

3,6,15 \_\_\_\_\_ ,123,366

(a) 34                      (b) 59

(c) 42                      (d) 60

43. Which number will come next?

1,2,5,12,27,58,\_\_\_\_\_

(a) 121                      (b) 136

(c) 135                      (d) 174

44. Which number will come next?

4,11,7,14,10, 17.

(a) 24                      (b) 13

(c) 20                      (d) 21

45. Which number will come next?

2,6, 12,20,30,42\_\_\_\_\_

(a) 56                      (b) 54

(c) 50                      (d) 62

45. Insert the missing number:

68 10 11 14 15

(a) 12                      (b) 16

(c) 14                      (d) **18**

46. Insert the missing number:

17(112) 39 28(...)49 .

(a) 164                      (b) 144

(c) **154**                      (d) 174

47. Insert the missing number:

234 (333) 257 345(...)678

(a) 233                      (b) **333**

(c) 133                      (d) 433

48. Ahmed spend Rs.44,000 to get a car and sells it at Rs.48,000. Find its percentage of profit?

(a) 12%                      (b) **9.09%**

(c) 14%                      (d) 80%

49. Sohail Khan sold a car Rs.80,000 which he was bought for Rs.90,000. What is his % loss?

(a) 61.40%                      (b) **55.51%**

(c) 12.31%                      (d) **11.11%**

50. The number, whose 3% is 60, is

(a) **2000**                      (b) 3000

(c) 6000                      (d) 9000

51. The number, whose 5% is 35, is

(a) 500                      (b) 600

(c) **700**                      (d) 800

52. If takes 14 taps to fill a swimming pool in 10 hours. How much time will it take 5 taps to fill the pool?

(a) 25                      (b) 26

(c) 27                      (d) **28**

53. The number, whose 25% is 75, is

(a) 600                      (b) 500

(c) **300**                      (d) 400

54. 8 machines Can do a piece of work in 10 days. How long will it take 16 machines to do the work?

(a) 7 days                      (b) **5 days**

(c) 6 days                      (d) 8 days

55. 120 men are used to build huge-building for 30 days. How long will it take 80 men to do the same work?

(a) **35 days**                      (b) 30 days

(c) 45 days                      (d) 40 days

56. Akbar bought a sweater for Rs.200 and sold it Rs,250. How much profit did Akbar get?

(a) Rs.40                      (b) Rs.20

(c) Rs.80                      (d) **Rs.50**

57. The number, whose 20% is 100, is

(a) 400                      (b) **500**

(c) 600                      (d) 700

58. Salaam bought a pair of shoes for Rs.300 and sold it Rs.370. How much profit did Salaam get?

(a) Rs.80                      (b) **RS.70**

(c) Rs.75                      (d) Rs.20

59. The bridge is completed in 45 days by 105 men. How long it will take 90 men to do the work?

(a) 68.7days,                      (b) 61 days (c) **521/2days**                      (d) 60 days

60. If 40 men build 4 buildings in 12 months, how many men would be required to build 6 houses in 4 months?

(a) 114 men                      (b) **180 men**

(c) 140 men                      (d) T60 men

61. If 80 men dug 4 holes in 12 months, how many men would be required to dig 6 holes in 4 months?

(a) 140 men            (b) 410 men

(c) **360men**            (d) 40 men

62. If 15 men can do a piece of work in 8 days, how many men will finish it in 10 days?

(a) 14                    (b) **12**

(c) 16                    (d) 8

63. If 3 men or 6 boys can do a work in 20 days, then 6 men and 8 boys shall take:

(a) **6 days**                (b) 8 days

(c) 9 days                (d) 20 days

64. The number, whose 25% is 150, is

(a) **600**                    (b) 700

(c) 800                    (d) 900

65. If 20 men can do a piece of work in 8 days, how many men will finish it in 10 days?

(a) 4 men                (b) **16men**

(c) 8 men                (d) 18 men

66. AFTAB AKBAR bought a compact disc from a manufacturer for Rs. 200; he paid a 15% sales tax. If he sold the disc to a "Custodian" for Rs. 260, calculate the cash profit.

(a) **Rs. 30.00**                (b) Rs. 35

(c) Rs. 32.50                (d) Rs. 28.00

67. Akbar sold his old gun Rs.900, was bought for Rs.2500. What is the loss?

(a) **64%**                    (b) 82%

(c) 94%                    (d) 15%

68. The total distance from school to is 35km. Noor khan covered a distance of 20km. What percentage of the distance has he covered?



(a) 314%                      (b) 219%

(c) **48.57%**                      (d) 103.57%

69. This road is only 50 km long We covered a distance of 20 km. What percentage of distance have we covered?

(a) **40%**                      (b) 69%

(c) 48%                      (d) 53%

70. The price of a glass set increases Rs.600 to Rs.710. what is the percentage increase?

(a) **18.33%**                      (b) 17.33

(c) 10%                      (d) 14%

71. The original price of a gift pack is A discount of 15% is allowed in shop. What is the sale price,

(a) Rs.65                      (b) **Rs.68**

(c) Rs.61                      (d) Rs.50

72. 8 men can do a work in 60 days. How long will it take 6 men to do the work?

(a) **50days**                      (b) 90 days

(c) > 120 days                      (d) 19 days

73. Which number will come next?

1.2.4.8.16.

(a) 20                      (b) 24

(c) 28                      (d) **32**

74. Which number will come next?

6.3.12.6.24.

(a) **12**                      (b) 18

(c) 30                      (d) 48

76 Which number will come next?

64,32,16,8.\_\_\_\_\_

(a) 0 (b) 1

(c) 2 (d) 4

77. Which number will come next?

87,90,84,88,81,\_\_\_\_\_

(a) 85 (b) 98

(c) 86' (d) 76

78. Which number will come next?

2,4,7,11,16,\_\_\_\_\_

(a) 18 (b) 20

(c) 22' (d) 25

79. Which number will come next?

5,14,27,44,65,\_\_\_\_\_

(a) 109 (b) 90'

(c) 88 (d) 180

80. Which number will come next?

1,4,10, 22,46,\_\_\_\_\_

(a) 68 (b) 48

(c) 12 (d) 94'

81. Which number will come next?

3,6,8,16,19,\_\_\_\_\_

(a) 21 (b) 38'

(c) 35 (d) 36

82. Which number will *come* next?

212 179 146 113,\_\_\_\_\_

(a) 90 (b) 85

(c) 80 (d) 75

83. Which number will come next?

20, 32 45, 59, 74, \_\_\_\_\_ \*

- (a) 95                      (b) 90'  
(C) 85                      (d) 79

84. Which number will come next?

210, 195, 175, 150, 120 \_\_\_\_\_

- (a) 95                      (b) 90

- (c) 85'                      (d) 80

85. A can do a piece of work in 10 days and B can do it in 15 days. The number of days required by them to finish it, working together is

- (a) 8                      (b) 7

- (c) 6'                      (d) 4

86. Which number will come next?

3,6,^,20.7,42,9, \_\_\_\_\_

- (a) 60                      (b) 54

- (c) 72'                      (d) 66

87. Which number will come next?

2,3,5,6,,9,10,11,13, \_\_\_\_\_

- (a) 12                      (b) 15

- (c) 14'                      (d) 16

88. Which number will come next?

0,1,8,27,64, \_\_\_\_\_

- (a) 122    (b) 128.

- (c) 125'   (d) 256

89. A man pays 10% of his income for his income tax. If his income tax amounts to Rs. 1500, what is his income?

(a) Rs. 13000 (b) **Rs. 15000'** (c) Rs. 17000 (d) Rs. 19000

90. A man is 5 times as old as his son. 2 years ago the sum of the squares of their ages was 114. Find the present age of son.

(a) **7 years'** (b) 9 years  
(c) 8 years (d)  $8\frac{1}{2}$  years

91. The number, whose 13% is 52, is

(a) 300 (b) **400'**  
(c) 500 (d) 900

92. 15 men can do a work in 12 days. How long it will take. 9 men to do the work?

(a) 14 days (b) **20 days'**  
(c) 9 days (d) 19 days

93. 40 men can do work in 25 days. How long it will take 25 men to do the work? .

(a) 50 days (b) **40 days'**  
(c) 60 days (d) 70 days

94. 60 men can do a work in 40 days. How long it will take 20 men to do the work?

(a) 160 days (b) 40 days

(c) 180 days (d) **120 days'**

95. The number, whose 15% is 75, is

(a) **500'** (b) 600  
(c) 700 (d) 800

96. A shopkeeper bought a radio from a wholesaler for Rs. 250.00. In addition, he paid a sales tax of 15% on the cost price. He then sold the radio for Rs. 315.00. Calculate the cash profit made by the shopkeeper.

(a) Rs. 20.00 (b) Rs. 22.50

(c) Rs. 25.00 (d) **Rs. 27.50'**

97. A man takes 50 minutes to cover a certain distance at a speed of 6 km/hr. If he walks with a speed of 10 km/hr, he covers the same distance in

(a) 1 hour (b) 30 minutes'

98. The number, whose 5% is 10, is

(a) 100' (b) 200  
(c) 300 (d) 400

99. The difference between simple and compound interest on Rs. 1625 for 3 years at 4% per annum in rupees is

(a) 7.95 (b) 7.90'  
(c) 7.70 , (d) 7.75

1. 100. The number, whose 5% is 55,,is

(a) 1100' (b) 2100  
(c) 1200 (d) 1300

2. 101. We covered a 150 km distance of Islamabad road. The total distance is 370 km. What percentage of distance have we covered?

(a) 30%' (b) 40.54%  
(c) 67% (d) 41%

102. Which number will come next?

1,0,3,2,5,6,\_\_\_\_\_

(a) 9 (b) 8

(c) 7' (d) 10

103. Insert the missing number:

4 5 7 11 19

(a) 22 (b) 32

(c) 35^ (d) 24

104. Insert the missing number:

8 7 9 13 21

- (a) 40                      (b) 38  
(c)  $37^{\wedge}$                       (d) 39

105. Insert the missing number:

64 48 36 34

- (a) 33                      (b) 32  
(c) 38                      (d) 30

106. Insert the missing number:

718 (26) 582 474 (...) 226

- (a) 16                      (b) 14  
(c) 18                      (d) 12

107. Insert the missing number:

11 12 14 ? 26 42

- (a) 28                      (b) 24

- (c) 18                      (d) 32

108. Which one number will complete following number series?

8, 9, 8, 7, 10, 9, 6, 11, 10, \_\_\_\_\_ 12

- (a) 11                      (b) 7

- (c) 7                      (d) 5'

109. Which number will come next?

Series: 1, 3, 7, 15, 31, 63, \_\_\_\_\_

- (a) 123                      (b) 125

- (c) 127'                      (d) 129

110. By selling a fan for Rs. 475, a person j loses 5%. To get a gain of 5%, he should 1 seU the fan for:

- (a) Rs. 500                      (b) **Rs. 525'**  
(c) Rs. 535                      (d) Rs. 575

111. The enrollment in a certain secondary school was 450 in 1979. By 1980 the enrollment had increased by 16%, what was the enrollment in 1980?

- (a) Rs.512                      (b) Rs.518

- (c) **Rs.522^**                      (d) Rs.526

113. Which number will come next?

5,3,6,2,7,1————

- (a) 0                              (b) 2

- (c) **8'**                              (d) 4

114. All gained 510 marks in matriculation examination. What percentage of marks did he gain?

- (a) **60%'**                      (b) 57%  
(c) 71%                      (d) 73%

115. Akhtar scored 178 marks out of 300 marks in a certain test. What percentage of marks did he score?

- (a) 48%                      (b) 52.41%

- (c) 61.41%                      (d) **59.33%'**

116. The price of a book increases from Rs.120 to Rs.150. What is the percentage increases?

- (a) 35%                      (b) **25%'**  
(c) 115%                      (d) 25.25.1

117. .A cyclist covers 660 feet in 66 seconds. How many yards will he cover in the same time?

- (a) **220'**                      (b) 600

118. The sum of 2 numbers is 84, if one of them exceeds, the other by 12.Find the numbers?

- (a) 40,52                      •      (b) 1,13

- (c) **36,48**                      (d) 72,84

119. The number, whose 7% is 14, is

(a) 500 (b) 400

(c) 300 (d) **200**

120. if the difference between 5 times and 9 times of a number is 24 the number is

(a) 4 (b) 5

(c) **6** , (d) 7

121. The speed of a car is 30km first hour and 32 km in the second hour ,!ts average speed is

(a) 30 km . (b) **31 km**

(c) 32km (d) 33 km

122. The number, whose 7% is 21, is

(b) 500 (b) 400-

(c) **300** (d) 200

123. What sum of money will amount to Rs,1800 in 5 years at 12% per annum simple interest"

(a) 1000 (b) 1120

{c) **1125** (d) 1130

124. Anwar bought a shirt for Rs.SOO and sold it Rs,525, What profit did Anwar get?

(a) Ra.35 (b) Rs.30

(c) **Rs.25** (d) Rs.20

125. Sarwar Gujar bought a table for Rs.200 and sold it Rs.17\$, How much loss did Sarwsr Gujar gsi?

(a) **Rs,25** (b) Rs,20

(c) Rs.40 (d) Rs.30

126. All sold a table for Rs.SOO which he was bought for Rs.1000. What is his % loss?

(a) **20%** (b) 80%

(c) 14% (d) 17%

127. Which number will come next?

8,13,10,15,12,17,14——



- (a) 19                      (b) 22  
(c) 16                      (d) 20

128. Which number will come next?  
2.5.8.11.14.

- (a) 18                      (b) 17  
(c) 19                      (d) 16

129. Which number will come next?  
1,1,8,4,27,9,;\_\_\_\_\_ „\_

- (a) 4                      (b) 6

- (c) 9                      (d) 16

130. Which number wiii come next?  
2.20,74,110,\_\_\_\_\_

- (a) 115                      (b) 132

- (c) 114                      (d) 182

131. A basketball team won 18 out of 30 games played, What percentage of marks did he score?

- (a) 8Q%                      (b) 40%  
(c) 43%                      (d) 87%

132. The number, whose 9% is 63, Is

- (a) 700                      (b) 800  
(c) 900                      (d) 600

133. The bridge is completed in 20 days by 80 men, How long would 70 men to eomplete the work?

- (a) 30 days                      (b) 29 days

- (c) 23 days                      (d) 26 days

134. The road is completed In 35 days by 70 men. How long it will take 40 men to eomplite the work?

- (a) 58 days                      (b) 61 days  
(6) 30 days                      (d) 32 days

# Math Short Questions

Posted by [Muneer Hayat](#) on 28 June 2014, 3:51 am

# Math Short Questions

## Math Short Questions

Prove that  $Z + \bar{Z}$  is real.

2. If  $Z = a + i b$  then prove that  $Z - \bar{Z}$  is imaginary.

3. If  $Z = a + i b$  then prove that  $z \cdot \bar{z} = |Z|^2$

4. Prove that  $Z = \bar{z}$  iff  $Z$  is real.

5. Find the multiplication Inverse of  $2 + 3 i$ .

— —

6. Express  $(4 + \sqrt{-3})(3 + \sqrt{-3})$  in the form of  $a + bi$ .

—

7. Express  $\sqrt{3} + i$  in polar form.

8. Express  $1 - i$  in polar form.

9. Factorize a

10. (Factorize)  $7 \times 2$

11. Simplify  $(1, -2) / (3, 4)$ .

—

12. Show that  $\sqrt{3}$  is an irrational number.

13. Prove that  $(Z_1 / Z_2) = Z_1 / Z_2$ , For all  $Z \in \mathbb{C}$ .

.

2

+ 9 b<sup>2</sup>

.

+ 7y<sup>2</sup>

A set has ..... objects.

(a) Identical (b) Not well-defined

(c) Distinct (d) None

2.  $B = \{x \mid x \in \mathbb{N} \wedge 1 \leq x \leq 10\}$

(a) The descriptive method (b) The tabular method

(c) Set-builder notation (d) None of these

3. The set  $\{1, 2, 3\}$  and  $\{2, 1, 3\}$  are .....

(a) Equal (b) Equivalent

(c) Different (d) Equal and Equivalent

4. A Singleton set has.....

(a) One element (b) No element

(c) Two element (d) None of these

5. If every element of a set A is an element of set B then .....

(a)  $A \subset B$  (b)  $A \subseteq B$  (c)  $B \subset A$  (d) None

6. If B is a super set of A then .....

(a)  $A \subset B$  (b)  $B \subset A$  (c)  $B \supset A$  (d) None

7. A is an improper subset of B when  $A \subset B$  and.....

(a)  $A = B$  (b)  $A - B = U$  (c)  $A \cap B = \Phi$  (d) None

8. If  $A = \{ \}$  then  $P(A) = \dots\dots\dots$

(a) Empty set (b)  $\{0\}$  (c)  $\{\Phi\}$  (d) None

9. If  $n(s) = m$ , then  $nP(s) = \dots\dots\dots$

(a)  $2^m$

10.  $A \cup B$  is defined as  $\dots\dots\dots$

(a)  $\{x / x \in A \vee x \in B\}$  (b)  $\{x / x \in A \wedge x \in B\}$

(c)  $\{x / x \in A \wedge x \in B\}$  (d) None

11.  $A \cap B$  is defined as  $\dots\dots\dots$

(a)  $\{x / x \in A \vee x \in B\}$  (b)  $\{x / x \in A \wedge x \in B\}$

(c)  $\{x / x \in A \wedge x \in B\}$  (d) None

12. The complement of a set  $A$  is defined as  $\dots\dots\dots$

(a)  $A'$

(c)  $A'$

13.  $A \cup \Phi = \dots\dots\dots$

(b)  $2^{m-1}$

(c)  $2^{m+1}$

$= \{x / x \in U \wedge x \in A\}$  (b)  $A'$

$= \{x / x \in U \vee x \in A\}$  (d) None

(a)  $A$  (b)  $\Phi$  (c)  $u$  (d) None

14.  $A \cap \Phi = \dots\dots\dots$

(a)  $A$  (b)  $\Phi$  (c)  $A'$

15.  $A - \Phi = \dots\dots\dots$

(a)  $A$  (b)  $\Phi$  (c)  $A/$

16.  $(A \cup B)/$

$= \dots\dots\dots$

(a)  $A/ \cup B/$

17. If  $A \times B = B \times A$  then  $\dots\dots\dots$

(a)  $A = B$  (b)  $A \cap B = \Phi$  (c)  $A = B$  (d) None

18. The function  $f: A \rightarrow B$  is  $A$  into  $B$  function when  $\dots\dots\dots$

(a)  $\text{Ran } f = B$  (b)  $\text{Ran } f \neq B$  (c)  $\text{Ran } f = A$  (d) None

19. Which one is linear function?

(a)  $\{(x, y) \mid y = mx + c\}$  (b)  $\{(x, y) \mid y = mx$

(c)  $\{(x, y) \mid y$

20. Which one is quadratic function?

(a)  $\{(x, y) \mid y = mx + c\}$  (b)  $\{(x, y) \mid y$

(c)  $\{(x, y) \mid y = ax$

(b)  $A/ \cup B$  (c)  $A \cap B$

$/$

(d)  $A \cap B$

$2$

$+ c\}$

$2$

$= mx + c\}$  (d) None

2

$$= mx + c$$

2

$$+ bx + c \} \text{ (d) None}$$

Write down the power set of  $A = \{9, 10\}$  possible subsets of A are  $\Phi$ ,

$\{9\}$ ,  $\{10\}$ ,  $\{9, 10\}$  so power set of  $A = \{\Phi\}$ ,  $\{9\}$ ,  $\{10\}$ ,  $\{9, 10\}$

2. If  $A = \{1, 2, 3, 4\}$   $B = \{4, 5, 6\}$  then verify the Commutation property of union.

3. If  $v = \{(x, y) \mid x$   
function.

4.  $r = \{(x, y) \mid y = 2x + 3\}$  then show that r and r

5. Why  $(\mathbb{N}, +)$  is not a group.

6. State and prove associative property of union and intersection.

7. For any sets A, B, C Prove that

$$(i) A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$$

$$(ii) A \cap (B \cup C) = (A \cap B) \cup (A \cap C)$$

8. Let A, B are the subsets of a universal set X then prove that

$$(i) (A \cup B) \cap C$$

$$(ii) (A \cap B) \cup C$$

9. Define a group. Is  $\mathbb{Z}$  the set integer is a group under multiplication.

10. Show that set  $\{1, w, w^2\}$

11. Does the set  $\{1, -1\}$  possess the closure property w.r.t

(i) Addition (ii) multiplication

2

2

$= 9, |x| \leq 3, |y| \leq 3\}$  show that  $r$  is not a

$+ y$

-1

are functions.

$= AC$

$\cap BC$

$= AC$

$\cup BC$

2

$\}$  where  $w$

3

$=1$  is a group under multiplication.

Trivial solution of homogeneous linear equation is

(a)  $(1, 0, 0)$  (b)  $(0, 1, 0)$  (c)  $(0, 0, 1)$  (d)  $(0, 0, 0)$

2. For non-trivial solution  $|A|$  is .....

(a)  $|A| > 0$  (b)  $|A| < 0$  (c)  $|A| = 0$  (d) None

3. For trivial solution  $|A|$  is.....

(a)  $|A| > 0$  (b)  $|A| < 0$  (c)  $|A| = 0$  (d) None

4. System of linear equations is Inconsistent if .....

(a) System has no solution (b) System has many solution

(c) System has unique solution (d) None

5. Minimum number of equation for any system of equations

(a) 2 (b) 3 (c) 4 (d) 10

6. The matrix  $A$  is Hermitian when  $(A)^t$

(a)  $A$  (b)  $-A$  (c)  $A^t$

7. The square matrix  $A$  is skew-Hermitian when  $(A)^t$

(a)  $A$  (b)  $-A$  (c)  $A$  (d)  $-A$

8. The square matrix  $A$  is skew – Symmetric when  $A^t$

(a) 0 (b)  $A$  (c)  $-A$  (d) None

= .....

(d)  $A$

=.....

= .....

## Math MCQs-Short Questions Of Algebra And Trigonometry

Math MCQs-Short Questions of Algebra and Trigonometry

1.  $\sqrt{2}$  is a \_\_\_\_\_ number.

(a) Rational (b) irrational (c) Prime (d) None



2. Circumference of any circle = .....

Length of its diameter

(a)  $\pi / 2$  (b)  $-\pi$  (c)  $\pi$  (d)  $2\pi$

3.  $\pi$  is a .....

(a) Whole number (b) Natural number

(c) Rational Number (d) Irrational number

4. Modulus of complex number  $3 - 4i$  is .....

(a) 4 (b)  $-5$  (c) 5 (d) 0

5. Additive inverse of  $(a, b)$  is .....

(a)  $(a, -b)$  (b)  $(-a, b)$  (c)  $(-a, -b)$  (d) None

6.  $Z - Z =$  .....

(a) Real number (b) Complex number

(c) 0 (d) -1

7.  $Z + Z =$  .....

(a) Real number (b) Complex number

(c) 0 (d) None

8.  $Z \cdot Z =$  .....

(a)  $|Z|$  (b)  $|Z|^2$

9. The set  $\{I, -1\}$  possesses closure property w.r.t. ....

(a) Addition (b) Subtraction

(c) Multiplication (d) None

10. 1 in polar form can be written as.....

(a)  $\cos 0 + i \sin 0$  (b)  $\cos \pi + i \sin \pi$

(c)  $\cos \pi/2 + i \sin \pi/2$  (d) None

11.  $Z = 1 + i$  in Polar form can be written as.....

--

(a)  $\sqrt{2} (\cos \pi/2 + i \sin \pi/2)$  (b)  $\sqrt{2} (\cos \pi/4 + i \sin \pi/4)$

--

(c)  $\sqrt{2} (\cos \pi + i \sin \pi)$  (d) None

12.  $i$  in polar form can be written as.....

(a)  $(\cos \pi/2 + i \sin \pi/2)$  (b)  $\cos (-\pi/2) + i \sin (-\pi/2)$

(a)  $\cos \pi + i \sin \pi$  (d) None

13.  $(-1)^{21/2}$

(a) -1 (b) +1 (c)  $i$  (d)  $-i$

--

14. If  $x$  is not a perfect square then  $\sqrt{x} = \dots\dots\dots$

(a) Prime number (b) Rational number

(c) Irrational number (d) None of these

(c) 0 (d) None

= .....

## Mathematics Mcqs Practice Test

Posted by [adeelabbasbk](#) on 27 August 2013, 12:09 pm

## Mathematics Mcqs Practice Test

$$\left( \frac{-1 + \sqrt{-3}}{2} \right)^4 + \left( \frac{-1 - \sqrt{-3}}{2} \right)^4$$

0

1

-1

4

**{1, 2, 3, 4, 5, 6 .....} IS CALLED AS THE SET OF .....**

Prime numbers

Whole numbers

Natural numbers

Irrational numbers

**EVERY RECURRING DECIMAL REPRESENTS**

a natural number

a rational number

an irrational number

a whole number

**1.4142135... IS .....**

a natural number

a rational number

a prime number

a rational number

**IF  $\log X = 3$  THEN  $X = \dots\dots\dots$**

125

500

25

625

**$(3^{-12})^{1/2} = \dots\dots\dots$**

$3^{-6}$

$3^6$

$3^{-12}$

$3^{12}$

$\sqrt{35}$  is \_\_\_\_\_

a prime number

an integer

a whole number

an irrational number

**IF  $\tan A$  AND  $\sin A$  ARE BOTH SMALLER THAN 0, THEN  $A$  MAY LIE IN**

the 1st quadrant

the 2nd quadrant

the 3rd quadrant

the 4th quadrant

**IF  $(2, 3)$  AND  $(2, 5)$  ARE END POINTS OF DIAMETER OF A CIRCLE THEN THE CENTER OF THE CIRCLE IS ..**

$(2, 4)$

$(4, 8)$

$(0, 2)$

(0, -2)

**IF  $X-A$  IS A FACTOR OF POLYNOMIAL  $P(X)$ , THEN  $P(A)=?$**

Divisor

Quotient

Remainder

N.O.T

**A BINARY OPERATION  $*$  IN  $Q$  DEFINED BY  $A * B$  BY  $A * B + 4A.B$  THE INVERSE OF  $1/12$  IS  $=?$**

$3/4$

$1/4$

$1/12$

N.O.T

**ANON-TERMINATING, NONE-RECURRING DECIMAL REPRESENT**

a natural number

a rational number

an irrational number

a prime number

**THE NUMBER OF COMPLEX CUBE ROOTS OF UNITY IS**

One

two

three

four

**THE SET  $R-\{0\}$  OF REAL NUMBERS IS CLOSED W. R. T?**

Addition

Multiplication

Division

A .O. T

**THE EQUATION OF CIRCLE WITH CENTER ORIGIN AND RADIUS R IS ...**

$$x^2 + y^2 = 1$$

$$x^2 + y^2 = r^2$$

$$x^2 + y^2 = 0$$

$$x^2 - y^2 = r^2$$

## Math Mcqs Practice Test

Posted by [Muneer Hayat](#) on 13 October 2014, 2:40 am

Math Mcqs Practice Test

The percentage of water in 20 litres of adulterated milk is 10. The quantity of water to be added to it to increase the %age of water to 25% is

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

In what proportion must a grocer mix rice at Rs: 1.2 per kg and Rs: 1.44 per kg so as to make a mixture worth Rs: 1.3 per kg?

- A. 18?24 B. 7?5  
C. 3?4 D. 2?5

In what proportion must a man mix milk at Rs: 11 per liter with milk at Rs: 6 per liter so the mixture be worth Rs: 8 per liter?

- A. 2?3 B. 3?2  
C. 5?7 D. 5?6

A mixture of 70 litres of milk and water contains 10% water. How much water must be added to make water 12

- A. 2 B. 5  
C. 10 D. 12

One liquid contains 20% of water another Contains 35% of water. A glass filled with 5 parts of first liquid and 10 parts of second the percentage of water in the new mixture

- A. 37% B. 30%  
C. 45% D. 20%

If 4 Kg rice of superior quality of Rs: 6 a Kg be mixed with 6 kg. Rice at Rs: 4 per Kg of inferior quality the price of the mixture per kg shall be

- A. Rs: 5.00 B. Rs: 4.80  
C. Rs: 4.70 D. Rs: 4.35

The ratio in which the two quantities of rice at Rs: 6 and Rs: 4 per kg be mixed respectively in order the mixture may cost Rs: 4.80/kg is

- A. 2:3 B. 3:2  
C. 1:4 D. 1:5

A jar contains three parts of pure milk and one part of water. How much of the mixture must be drawn and water substituted in order that the result mixture may be half milk and half water

- A. 1/4 th B. 1/2nd  
C. 1/3rd D. 1/5th

A shopkeeper mixes two kinds of sugar. One costing Rs: 3.50 kg and the other Rs: 2.25 Kg so that the price of the mixture is Rs: 2.75/kg. The ration of the first kind of the sugar to that of the second must be

- A. 1:2 B. 1:3  
C. 2:3 D. None of these

A producer blends two qualities of rice one costing Rs: 12.50 per kg and other costing Rs: 14:00 per kg in the ration of 4:5. Find the profit percent if he sells the mixture at the rate of Rs: 16 per kg

- A. 10% B. 15%  
C. 20% D. 25%

Regard,

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F.B

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