

Brihan Mumbai Ganit Adhyapak Mandal, Mumbai

Date : 29-7-2017
Std. : VIII

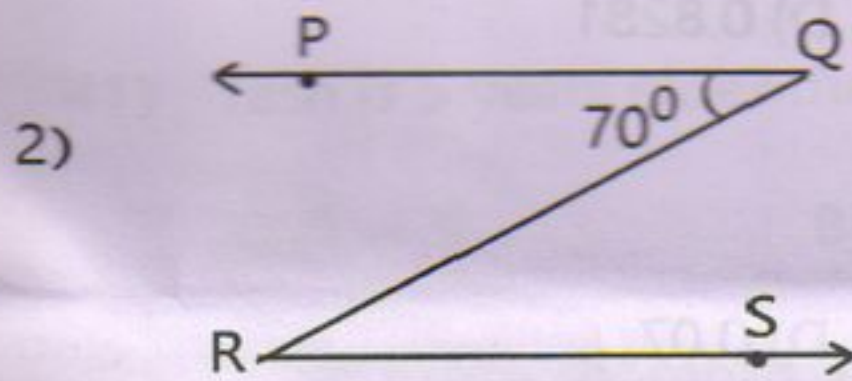
Maths Concept Exam 2017

Time : 3 p.m. to 5 p.m.
Max. Marks : 100

- Instructions :
- 1) Question paper and answersheet are separate.
 - 2) Rough work is to be done in the space provided in each page of the question paper.
 - 3) Do not fold the answersheet.
 - 4) Colour the correct alternative with the ball-pen as follows.
- Ex. 1. How many days does the month of March have?
A) 30 B) 31 C) 29 D) 28
- Correct answer is B; so B should be coloured as shown below.
- A) **B)** C) D)

1) $8 \times 10^5 + 4 \times 10^3 + 2 \times 10^0 + 9 \times 10 = ?$

- A) 804291 B) 84920 C) 804092 D) 804029



If ray $QP \parallel$ ray RS , and $\angle PQR = 70^\circ$. Find the measure of $\angle QRS$

- A) 70° B) 110° C) 80° D) None of these

3) Find the L.C.M. of 12, 8 and 10

- A) 240 B) 120 C) 60 D) 960

4) Solve $144 \times 735 - 725 \times 144$

- A) 10 B) 1 C) 1440 D) 144

(P.T.O.)

Rough work

5) Add the following :

$$15 mn - 6 ab + 7 abc; abc - 8nm + 20 ba$$

A) $7 mn + 14 ab + 8 abc$

B) $23 mn - 14 ba + 8 abc$

C) $15 mn - 8nm - 6 ab + 20 ba + 8 abc$

D) $16 mn - 14 ab + 27 abc$

6) Find the ratio of 150 kg. to 2250 gms.

A) 1 : 15

B) 2 : 3

C) 200 : 9

D) 200 : 3

7) The average of five consecutive numbers is 49. What is the greatest number ?

A) 48

B) 50

C) 52

D) 51

8) From given statement answer the Q. 8 and Q. 9

$$\text{If } 169 \times 49 = 8281$$

$$\text{Then find } 1.69 \times 4.9 = ?$$

A) 82.81

B) 8.281

C) 828.1

D) 0.8281

9) $\sqrt{\frac{82.81}{1.69}} = ?$

A) 0.7

B) 7

C) 70

D) 0.07

10) What is the volume of a cube whose side is 9cm.

A) 81 cm^3

B) 729 cm^3

C) 81 cm^2

D) 27 cm^3

11) Solve $2x - 7 = 5x + 2$

A) -3

B) 15

C) 1

D) 3

12) Which number from the following cannot be a perfect square ?

A) 0.0001

B) 0.5929

C) 31.37

D) 0.0625

Rough work

13) Find the fraction at the place of ☆ in the given series.

$$\frac{1}{4}, \frac{3}{16}, \frac{5}{36}, \frac{7}{64}, \star, \frac{11}{144}$$

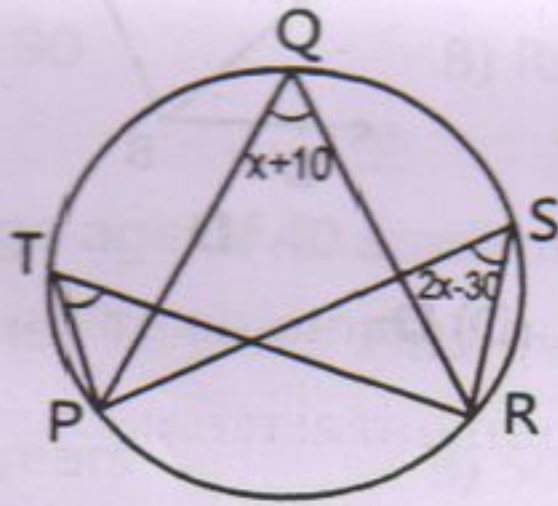
A) $\frac{8}{9}$

B) $\frac{9}{100}$

C) $\frac{9}{80}$

D) $\frac{9}{121}$

14)



In adjoining figure, If $\angle Q = (x + 10)^\circ$

$$\angle S = (2x - 30)^\circ$$

then find $\angle T$

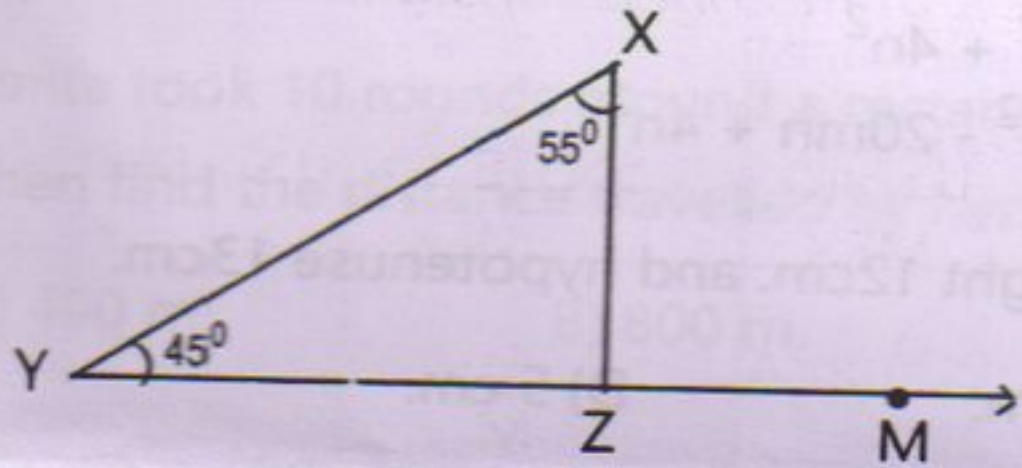
A) 70°

B) 50°

C) 110°

D) 40°

15)



In adjoining figure, $\angle X = 55^\circ$

$\angle Y = 45^\circ$ then find measure of

$$\angle XZM$$

A) 80°

B) 100°

C) 55°

D) 95°

16) $0.4 \times 0.05 \times 0.005 = ?$

A) 1

B) 0.0001

C) 0.01

D) 0.100

17) Find the value of $(-2^3)^2$

A) 64

B) -64

C) -512

D) 512

18) If principal is Rs. 5000; rate of interest is 4.5 p.c.p.a. and the interest is Rs. 450. Then find the period.

A) 10 years

B) 2 years

C) 5 years

D) 2.5 years

(P.T.O.)

Rough work

19) Solve: $\frac{162}{11} = ?$

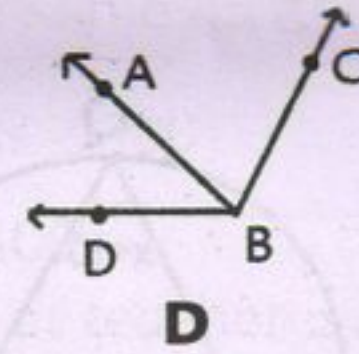
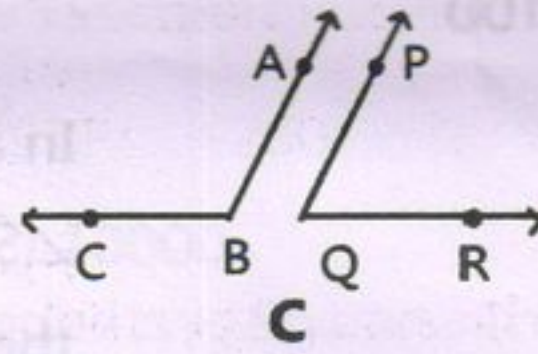
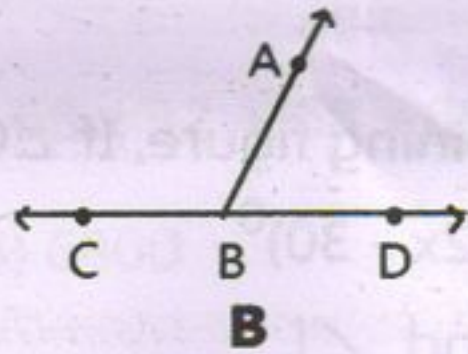
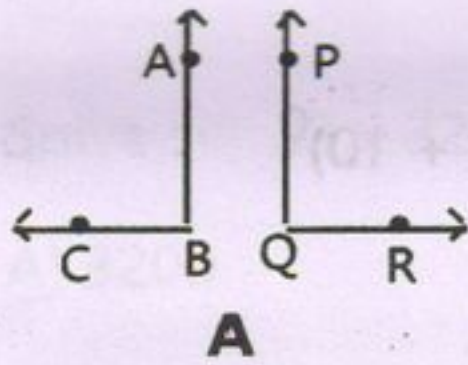
A) $16.\overline{2}$

B) $14.\overline{7}$

C) $14.\overline{72}$

D) $1.\overline{62}$

20) Out of the following which figure represent linear pair of angles ?



A) **A**

B) **B**

C) **C**

D) **D**

21) Expand: $(5m - 2n)^2$

A) $25m^2 - 10mn + 4n^2$

B) $25m^2 + 4n^2$

C) $25m^2 - 4n^2$

D) $25m^2 - 20mn + 4n^2$

22) Find the base of a right angled triangle having height 12cm. and hypotenuse 13cm.

A) 25 cm^2

B) 1 cm.

C) 25 cm.

D) 5 cm.

23) If product of two different numbers is 180 and their L.C.M. is 60. Find their H.C.F.

A) 30

B) 3

C) 120

D) 90

24) Find the simple interest on Rs. 8500 at the rate of 5 p.c.p.a. for 2 years.

A) Rs. 475

B) Rs. 850

C) Rs. 170

D) Rs. 8500

25) 25 workers complete a work in 10 days. Find the number of days require to finish same work by 10 workers ?

A) 25 days

B) 4 days

C) 10 days

D) 40 days

Rough work

- 26) If a number $68\star35$ is completely divisible by 15 then what would be the smallest digit at the place of \star ?
- A) 2 B) 0 C) 5 D) 3
- 27) Cost of 28 items is Rs. 560 then find the cost of same 45 items.
- A) Rs. 90 B) Rs. 1260 C) Rs. 9000 D) Rs. 900
- 28) Average age of 40 students is 9 years. The age of teacher is added then average age becomes 10 years. Find the age of the teacher.
- A) 40 years B) 50 years C) 41 years D) none of these
- 29) Smita took 10 rounds around a rectangular garden of 25×15 meters dimensions. Then find the distance travelled by her.
- A) 400 m. B) 800 m. C) 80 m. D) 100 m.
- 30) The ratio of the cost of a table and chair is 8 : 6. If the cost of table is Rs. 6000. Then find the cost of chair.
- A) Rs. 6000 B) Rs. 4500 C) Rs. 2000 D) Rs. 3600
- 31) For the Republic Day celebration 784 students stood on the ground in such a way that the number of rows and the number of students in each row are the same. Find the number of rows.
- A) 22 B) 28 C) 42 D) 39 (P.T.O.)

Rough work

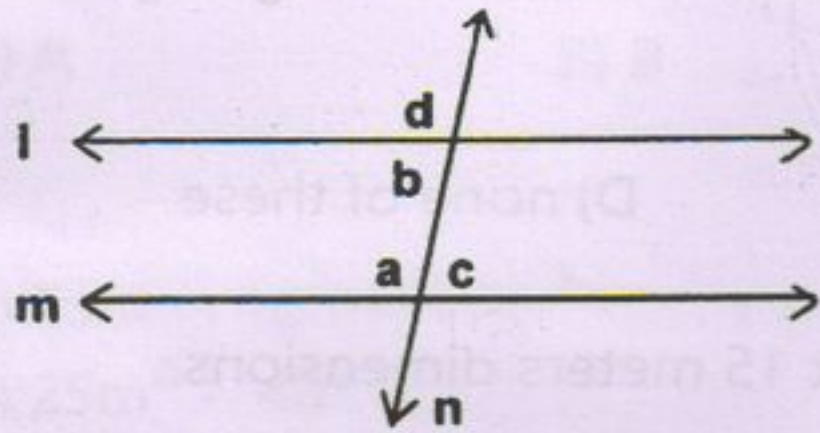
32) When 5 is added to a number and the sum is divided by 4, then the division is 21.
Find the number.

- A) 89 B) 42 C) 80 D) 79

33) Solve : $32 \times 32 + 2 \times 68 \times 32 + 68 \times 68 = ?$

- A) 3200 B) 6800 C) 10000 D) 100

34)



In the adjoining figure, line l || line m,
and line n is the transversal.

Which angle is congruent to $\angle a$?

- A) $\angle b$ B) $\angle c$ C) $\angle d$ D) none of these

35) $\frac{2^4 \times 3^2 \times 2^{-2}}{3^2} = ?$

- A) 4 B) 2^{-2} C) 3^0 D) 2^6

36) The length, breadth and the height of a water tank are 4.5 meters, 3 meters and 2 meters respectively. Find the volume of the tank.

- A) 27 m^2 B) 27 m^3 C) 2.7 m^3 D) 57 m^3

37) $(a + b)(b - a) = ?$ If $(a + b) = 7$ and $(a - b) = 3$

- A) 21 B) 28 C) -12 D) -21

Rough work

38) Vidya scored 450 marks out of 600. What is the percentage of her marks ?

A) $\frac{3}{4}$

B) 75%

C) 40%

D) 150%

39) From 1800 students of Std. VIII, 98% students passed in the exam. Then find the number of students failed in the examination.

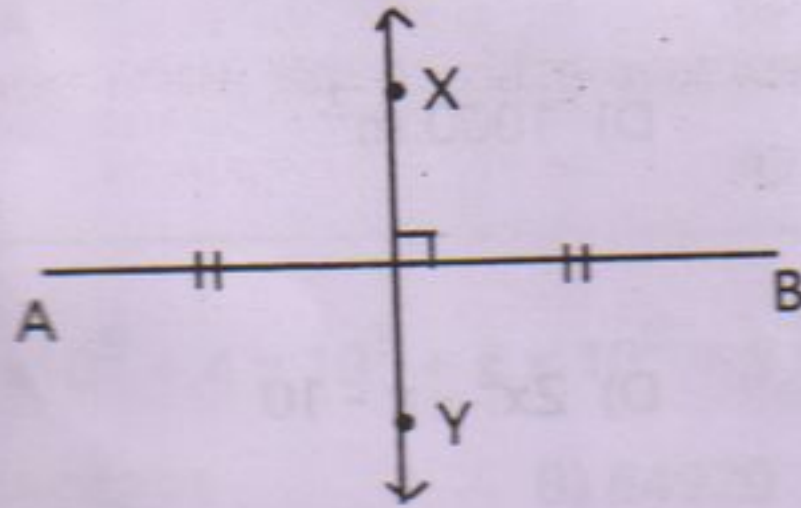
A) 2

B) 36

C) 20

D) 360

40)



Observe the adjoining figure and find the correct answer given below.

A) seg. AB is the perpendicular bisector of line XY.

B) Both are perpendicular bisectors of each other.

C) Line XY is the perpendicular bisector of seg. AB

D) All above answers are correct.

41) Yash is 5 years elder than Uma. After 2 years what will be the sum of their ages ?

A) $2x + 5$

B) $2x + 9$

C) $2x + 7$

D) $4x + 7$

42) \square ABCD is a rhombus. $l(BD) = 12$ cm. and $l(AC) = 16$ cm. Then what is the measure of side AB ?

A) 4 cm.

B) 10 cm.

C) 14 cm.

D) 28 cm.

43) Find a, if $\sqrt{36} + \sqrt{64} = \sqrt{a}$

A) 100

B) 14

C) 10

D) 196

44) Simplify : $25 + 5 - \{(-15) + (-3) + 5 [6 - (-7)]\}$

A) -17

B) 77

C) 66

D) -42

(P.T.O.)

Rough work

45) 40% of 40 is = ?

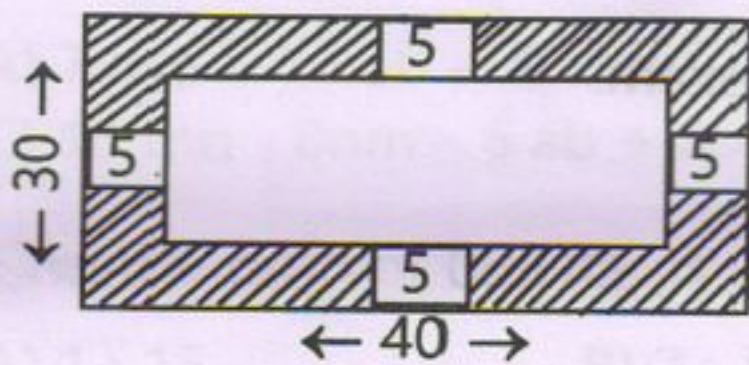
A) 160

B) 16

C) 4

D) 40

46)



In the adjoining figure, the shaded portion shows a footpath of uniform width 5 meter runs around inside of a rectangular field of dimensions 40 m. by 30 meters. Find the area of footpath.

A) 1200 m²

B) 600 m²

C) 800 m²

D) 1000 m²

47) Find product of $(x+2)(2x-5)$

A) $2x^2 + 7x + 10$

B) $2x^2 - 7x - 10$

C) $2x^2 - 3x + 10$

D) $2x^2 - x - 10$

48)
$$\frac{\sqrt{\sqrt{81} + \sqrt{256} + 39}}{\sqrt{\sqrt{169} - \sqrt{49} - 2}} = ?$$

A) 6

B) 8

C) 4

D) 2

49) Which of the following figure is having 4 axis of symmetry ?

A) Kite

B) Rectangle

C) Parallelogram

D) Square

50) When a saree is sold at Rs. 900 there was 10% loss. Find the cost price of the saree.

A) Rs. 990

B) Rs. 1000

C) Rs. 810

D) Rs. 1010



Rough work