

# Studybox Doon

RIMC Mock test 4 Maths

Exam ID: 229

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Exam Instructions

1. The timer has been set for the exam, and a countdown will display the remaining time. When the timer runs out, the exam will end automatically. No further action will be required after that.
2. You can flag any question that you want.
3. If you don't want to submit any of your provided answers, you can clear them.
4. If you choose to drop this exam, it will not be submitted, and no result will be generated.
5. Once you finish the exam, you cannot resume it.

## Question: 1 of 30

QID: 13051

Marks: 5

Shyam was asked to multiply a given number by  $\frac{5}{6}$ . By mistake, he divided the given number by  $\frac{5}{6}$ . His answer was 55 more than the correct answer. What was the given number?

Please write your answer below.

What is the highest four digit number which is divisible by each of the numbers 16, 36, 45, 48?

.....  
Please write your answer below.



12 people can paint 10 identical rooms in 16 days. In how many days can 8 people paint 20 such rooms?

.....  
Please write your answer below.



The four angles of a quadrilateral are in the ratio 3:5:7:9. Find the angles separately.

.....  
Please write your answer below.



Find x if

$$\left[\frac{5}{3}\right]^{-5} \times X \left[\frac{25}{9}\right]^{\frac{-11}{2}} = \left[\frac{5}{3}\right]^{8X}$$

Please write your answer below.



$a^3 - b^3 = 81$  and  $a - b = 3$  then what is the value of  $a^2 + b^2$

Please write your answer below.



Find the smallest number which when increased by 17 is exactly divisible by both 520 and 468.

Please write your answer below.



In how much time will a car, running at 50 km/hr, cover a distance of 500 km if it stops for half an hour after every 100 km?

.....  
Please write your answer below.



Two train running in opposite direction cross Shyam standing on the platform in 27 second and 17 second respectively and they cross each other in 23 seconds. The ratio of their speeds is?

Please write your answer below.



The volume of a cuboid is  $5184 \text{ cm}^3$ . It can be cut exactly into either 3 cm cube or 2 cm cubes. The ratio of length and breadth to its height is 4:3:2. Find the dimensions of the cuboid.

Please write your answer below.



Evaluate:

$$\frac{X^{5+n} X (x^2)^{3n+1}}{X^{7n-2}}$$

Please write your answer below.



From the adjoining figure, find the value of x.

$$\frac{5^5 \times 3^{-5}}{125 \times 6^{-5} \times 10^{-1}}$$

Please write your answer below.



Simplify  $84 - 7[11x - 4\{17x + 3(8 - (9 - 5x)7)\}]$

Please write your answer below.



From the adjoining figure, find the area of shaded region if AB = 8 cm and AD = 6 cm. [Take  $\pi = 3.14$ ]

$$\left(\frac{5}{7}\right)^{-x} \div \left(\frac{5}{7}\right)^{-4} = \left(\frac{5}{7}\right)^5$$

Please write your answer below.



By selling 90 ball pens for Rs 160 a person loses 20%. How many ball pens should be sold for Rs 96 so as to have a profit of 20%?

Please write your answer below.



A 125 m long train travelling at a uniform speed passes a stationary man in 3.75 seconds. Find the speed of the train in km/hr.

Please write your answer below.



The sum of the digits of a two digit number is 6 and its ten's digit is twice its unit digit. Find the number.

.....  
Please write your answer below.



Divide

$$6x^3 - 11x^2 + 7x + 5 \text{ by } 2x - 3$$

Please write your answer below.



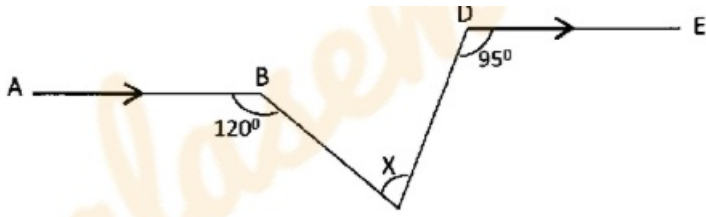
Identify the rule and find the missing number in the place of question marks.

| Items       | Rent | Food | Electricity | Education | Clothing | Savings |
|-------------|------|------|-------------|-----------|----------|---------|
| Amount (Rs) | 3000 | 2200 | 400         | 1200      | 1500     | 1800    |

Please write your answer below.



Identify the rule and find the missing number in the place of question marks.



Please write your answer below.



A can of oil was  $\frac{4}{5}$  full. When 6 bottles of oil were taken out from this can and 4 bottles of oil were poured into it, it was  $\frac{3}{4}$  full. How many bottles of oil can the tin contain? (All bottles are of equal volume)

Please write your answer below.



Divide ₹ 8000 into two parts such that if one part were lent at  $7\frac{1}{2}\%$  per annum for two years and the other at 8% per annum for three years. The total interest received is ₹ 1416.

Please write your answer below.



Solve

$$\frac{3x-5}{1} - \frac{1+x}{2} = 3 - \frac{x-1}{4}$$

Please write your answer below.



A train passes 330m long platform in 40 seconds and a man standing on the platform in 18 seconds. Find the speed of the train in km/hr and the length of the train in meter.

Please write your answer below.

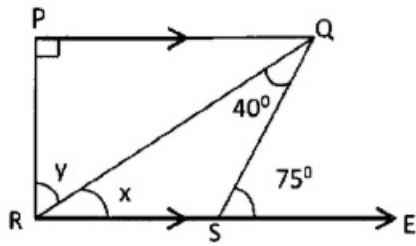


Priya got married 8 years ago. Today her age is  $1\frac{2}{7}$  times her age at the time of her marriage. At present her daughter's age is  $\frac{1}{6}$  th of her age. What was her daughter's age 3 years ago?

Please write your answer below.



The following number of cadets from class VIII show their interest in joining different hobbies club. Draw a pie-diagram to represent the above data.



Please write your answer below.



16 women can complete a work in 12 days. 4 children can complete the same work in 16 days. If 17 women and 8 children together work and 8 days 3 more children helped them, how many days will they now take to complete the work?

Please write your answer below.



A travelled a distance of 61 km in 9 hrs. He travelled partly on foot at 4 km/hr and partly on bicycle at 9 km/hr. Find the distance travelled on foot.

Please write your answer below.



The dimension of a room are  $12.5\text{m} \times 9\text{m} \times 7\text{m}$ . There are 2 doors and 4 window in the room; each door measures  $2.5\text{m} \times 1.2\text{m}$  and each window  $1.5\text{m} \times 1\text{m}$ . Find the cost of painting the walls at ₹ 3.50 per square meter.

Please write your answer below.



A can do piece of work in 10 days. B can do in 12 days and C in 15 days. All begin together but A leaves the work after 2 days and B leaves 3 days before the work is finished. How long did the work last?

Please write your answer below.



— END OF QUESTION PAPER —

## Answer Key

| No            | Question Type             | QID   | Correct Answer      |
|---------------|---------------------------|-------|---------------------|
| Question - 1  | Essay (Evaluted by Admin) | 13051 | Essay Type Question |
| Question - 2  | Essay (Evaluted by Admin) | 13052 | Essay Type Question |
| Question - 3  | Essay (Evaluted by Admin) | 13053 | Essay Type Question |
| Question - 4  | Essay (Evaluted by Admin) | 13054 | Essay Type Question |
| Question - 5  | Essay (Evaluted by Admin) | 13055 | Essay Type Question |
| Question - 6  | Essay (Evaluted by Admin) | 13056 | Essay Type Question |
| Question - 7  | Essay (Evaluted by Admin) | 13057 | Essay Type Question |
| Question - 8  | Essay (Evaluted by Admin) | 13058 | Essay Type Question |
| Question - 9  | Essay (Evaluted by Admin) | 13059 | Essay Type Question |
| Question - 10 | Essay (Evaluted by Admin) | 13060 | Essay Type Question |
| Question - 11 | Essay (Evaluted by Admin) | 13061 | Essay Type Question |
| Question - 12 | Essay (Evaluted by Admin) | 13062 | Essay Type Question |
| Question - 13 | Essay (Evaluted by Admin) | 13063 | Essay Type Question |
| Question - 14 | Essay (Evaluted by Admin) | 13064 | Essay Type Question |
| Question - 15 | Essay (Evaluted by Admin) | 13065 | Essay Type Question |
| Question - 16 | Essay (Evaluted by Admin) | 13066 | Essay Type Question |
| Question - 17 | Essay (Evaluted by Admin) | 13067 | Essay Type Question |
| Question - 18 | Essay (Evaluted by Admin) | 13068 | Essay Type Question |
| Question - 19 | Essay (Evaluted by Admin) | 13069 | Essay Type Question |
| Question - 20 | Essay (Evaluted by Admin) | 13070 | Essay Type Question |
| Question - 21 | Essay (Evaluted by Admin) | 13071 | Essay Type Question |
| Question - 22 | Essay (Evaluted by Admin) | 13072 | Essay Type Question |
| Question - 23 | Essay (Evaluted by Admin) | 13073 | Essay Type Question |
| Question - 24 | Essay (Evaluted by Admin) | 13074 | Essay Type Question |
| Question - 25 | Essay (Evaluted by Admin) | 13075 | Essay Type Question |
| Question - 26 | Essay (Evaluted by Admin) | 13076 | Essay Type Question |
| Question - 27 | Essay (Evaluted by Admin) | 13077 | Essay Type Question |
| Question - 28 | Essay (Evaluted by Admin) | 13078 | Essay Type Question |
| Question - 29 | Essay (Evaluted by Admin) | 13079 | Essay Type Question |
| Question - 30 | Essay (Evaluted by Admin) | 13080 | Essay Type Question |

--- END OF ANSWER KEY ---