

Q.1 A, B, C are three points so that $AB = 4$ cm, $BC = 6$ cm and $AC = 10$ cm. The number of circles passing through the points A, B, C is:

- Ans**
- 1. 1
 - 2. 3
 - 3. 0
 - 4. 2

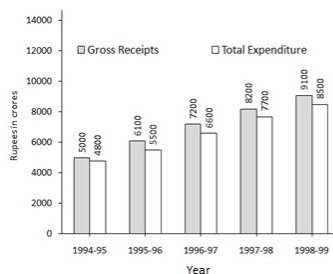
Question ID : 4244291071
 Status : Answered
 Chosen Option : 3

Q.2 The centroid of an equilateral ΔXYZ is L. If $XY = 12$ cm, then the length of XL (in cm), is:

- Ans**
- 1. $5\sqrt{3}$
 - 2. $2\sqrt{3}$
 - 3. $4\sqrt{3}$
 - 4. $3\sqrt{3}$

Question ID : 4244291073
 Status : Answered
 Chosen Option : 3

Q.3 Given bar graph shows, total expenditure and the gross receipts of a company (in ₹ crores). Study the graph and answer the question that follows

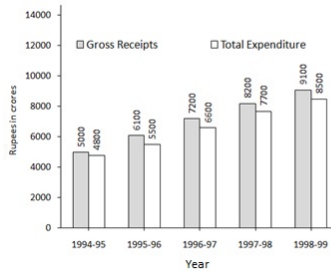


If profit = gross receipts – total expenditure, then in 1997-98, what percentage of gross receipts is the profit made? (Correct to one decimal place)

- Ans**
- 1. 4.8%
 - 2. 5.4%
 - 3. 3.9%
 - 4. 6.1%

Question ID : 4244291084
 Status : Marked For Review
 Chosen Option : 4

Q.4 Given bar graph shows, total expenditure and the gross receipts of a company (in ₹ crores). Study the graph and answer the question that follows.



What is the percentage increase in the gross receipts in 1996-97 as compared to 1994-95?

- Ans**
- 1. 41%
 - 2. 44%
 - 3. 42%
 - 4. 43%

Question ID : 4244291085

Status : Answered

Chosen Option : 2

Q.5 If $29^{41} + 37^{41}$ is divided by 33, then the remainder is:

- Ans**
- 1. 0
 - 2. 3
 - 3. 2
 - 4. 1

Question ID : 4244291078

Status : Answered

Chosen Option : 1

Q.6 Marked price of an article is 20% more than it's cost price. At what percent less should it be sold for no profit and no loss?

- Ans**
- 1. $16\frac{2}{3}\%$
 - 2. $16\frac{1}{3}\%$
 - 3. $14\frac{1}{3}\%$
 - 4. $14\frac{2}{3}\%$

Question ID : 4244291067

Status : Answered

Chosen Option : 1

Q.7 The sum of the squares of the sides of a rhombus is 900 m^2 . What is the side of the rhombus.

- Ans
- 1. 17 m
 - 2. 14 m
 - 3. 16 m
 - 4. 15 m

Question ID : 4244291064
Status : Answered
Chosen Option : 4

Q.8 If $1 + 9r^2 + 81r^4 = 256$ and $1 + 3r + 9r^2 = 32$, then find the value of $1 - 3r + 9r^2$.

- Ans
- 1. 4
 - 2. 8
 - 3. 16
 - 4. 12

Question ID : 4244291077
Status : Not Answered
Chosen Option : --

Q.9 If $0 < \theta < 90^\circ$, $3b \operatorname{cosec} \theta = a \operatorname{sec} \theta$ and $3a \operatorname{sec} \theta - b \operatorname{cosec} \theta = 8$, then the value of $9b^2 + a^2$ is:

- Ans
- 1. 7
 - 2. 9
 - 3. 8
 - 4. 6

Question ID : 4244291081
Status : Answered
Chosen Option : 2

Q.10 Find the value of $309 \div \left[\left(\frac{3}{2} \right) \text{ of } (25 + 35) - 12 \frac{3}{4} \right]$.

- Ans
- 1. 4
 - 2. 12
 - 3. 8
 - 4. 16

Question ID : 4244291079
Status : Answered
Chosen Option : 1

Q.11 The diameter of a wheel is 49 cm. The number of revolutions in which it will have to cover a distance of 770 m, is:

- Ans
- 1. 400
 - 2. 500
 - 3. 700
 - 4. 600

Question ID : 4244291072
Status : Answered
Chosen Option : 2

Q.12 Anil bought some articles at 6 for ₹8 and sold them at 10 for ₹12. His percentage loss or gain is:

- Ans
- 1. 10% loss
 - 2. 10% gain
 - 3. 8% gain
 - 4. 8% loss

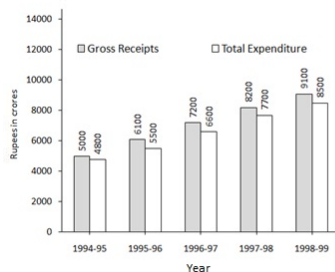
Question ID : 4244291068
Status : Answered
Chosen Option : 1

Q.13 If $a + 3b = 12$ and $ab = 9$, then the value of $(a - 3b)$ is:

- Ans
- 1. 9
 - 2. 8
 - 3. 6
 - 4. 4

Question ID : 4244291075
Status : Answered
Chosen Option : 3

Q.14 Given bar graph shows, total expenditure and the gross receipts of a company (in ₹ crores). Study the graph and answer the question that follows.



In order to make a profit of 20%, what should have been the gross receipts (in crore ₹) in 1995-96, if the total expenditure remained the same?

- Ans
- 1. 6445
 - 2. 7565
 - 3. 6875
 - 4. 5776

Question ID : 4244291086

Status : Not Answered

Chosen Option : --

Q.15 If $\operatorname{cosec}^2 x - 2 = 0$, then the value of $x(0 < x < 90^\circ)$ is:

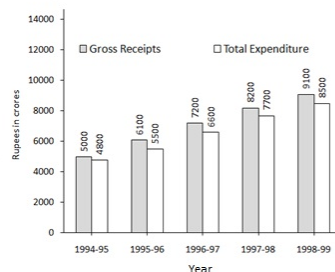
- Ans
- 1. 15°
 - 2. 60°
 - 3. 30°
 - 4. 45°

Question ID : 4244291082

Status : Answered

Chosen Option : 4

Q.16 Given bar graph shows, total expenditure and the gross receipts of a company (in ₹ crores). Study the graph and answer the question that follows.



The total expenditure of the company in 1998-99 exceeds that in 1994-95 by (in ₹ crore):

- Ans
- 1. 3800
 - 2. 4800
 - 3. 3700
 - 4. 5500

Question ID : 4244291083

Status : Answered

Chosen Option : 3

Q.17

If $a^2 + \frac{2}{a^2} = 16$, then find the value of $\frac{72a^2}{a^4 + 2 + 8a^2}$.

- Ans
- 1. 2
 - 2. 4
 - 3. 1
 - 4. 3

Question ID : 4244291076

Status : Answered

Chosen Option : 4

Q.18 The average of 24 numbers is 26. The average of the first 15 numbers is 23 and that of the last 8 number is 33. Find the 16th number.

- Ans
- 1. 16
 - 2. 17
 - 3. 15
 - 4. 18

Question ID : 4244291065

Status : Answered

Chosen Option : 3

Q.19 The printed price of a cooker is ₹2,000, and discounts are 30%, 20% and 10%, respectively. Find the selling price of the cooker.

- Ans
- 1. ₹1,002
 - 2. ₹1,008
 - 3. ₹1,004
 - 4. ₹1,006

Question ID : 4244291066

Status : Answered

Chosen Option : 2

Q.20 If $a : b = 3 : 4$, find the value of $(7a - 4b) : (8a + 4b)$.

- Ans
- 1. 1 : 8
 - 2. 2 : 3
 - 3. 3 : 8
 - 4. 2 : 5

Question ID : 4244291069

Status : Answered

Chosen Option : 1

Q.21 The value of $\sin 60^\circ \cos 30^\circ - \cos 60^\circ \sin 30^\circ$ is:

- Ans
- 1. 1
 - 2. $\frac{1}{2}$
 - 3. $\frac{\sqrt{3}}{2}$
 - 4. $\frac{1}{\sqrt{2}}$

Question ID : 4244291080
Status : Answered
Chosen Option : 2

Q.22 10 men working 5 hours/day earn ₹300. How much money will 15 men working 10 hours/day earn?

- Ans
- 1. ₹800
 - 2. ₹600
 - 3. ₹650
 - 4. ₹900

Question ID : 4244291062
Status : Answered
Chosen Option : 4

Q.23 Mohan travels three equal distances at speeds of 12 km/h, 18 km/h and 24 km/h. If he takes a total of 13 hours, then what is the total distance covered?

- Ans
- 1. 214 km
 - 2. 212 km
 - 3. 216 km
 - 4. 218 km

Question ID : 4244291063
Status : Answered
Chosen Option : 3

Q.24 The sum of simple interest on a sum at 8% p.a. for 4 years and 8 years is ₹960. The sum is:

- Ans
- 1. ₹800
 - 2. ₹1100
 - 3. ₹1000
 - 4. ₹900

Question ID : 4244291070
Status : Answered
Chosen Option : 3

Q.25 The side MN of $\triangle LMN$ is produced to X. If $\angle LNX = 117^\circ$ and $\angle M = \frac{1}{2} \angle L$, then $\angle L$ is:

- Ans
- 1. 78°
 - 2. 76°
 - 3. 77°
 - 4. 75°

Question ID : 4244291074

Status : Answered

Chosen Option : 1