

Q.1 In a 15% discount sale, the cost of a book is ₹2,150. What was the original price of the book?
(Correct to two decimal places)

- Ans
- 1. ₹1,527.00
 - 2. ₹2,500.00
 - 3. ₹2,529.41
 - 4. ₹2,250.50

Question ID : 424429864
Status : Answered
Chosen Option : 3

Q.2 The ratio of three angles of a triangle is 1 : 3 : 5. Which is the measure of the greatest angle?

- Ans
- 1. 120°
 - 2. 60°
 - 3. 80°
 - 4. 100°

Question ID : 424429871
Status : Answered
Chosen Option : 4

Q.3 The cost price of 33 books is the same as the selling price of 'x' books. If the profit is 10%, then the value of 'x' is :

- Ans
- 1. 30
 - 2. 20
 - 3. 40
 - 4. 10

Question ID : 424429866
Status : Answered
Chosen Option : 1

Q.4 If $a : b = 3 : \sqrt{5}$, then the value of $(2a + b) : (3a - 2b)$ is:

- Ans
- 1. $\frac{1}{64} (64 + 21\sqrt{5})$
 - 2. $\frac{1}{61} (64 + 21\sqrt{5})$
 - 3. $\frac{1}{62} (64 + 21\sqrt{5})$
 - 4. $\frac{1}{63} (64 + 21\sqrt{5})$

Question ID : 424429867
Status : Answered
Chosen Option : 2

Q.5 The radius of a circle is 15 cm and the length of one chord of the circle is 20 cm. What is the distance of the chord from the centre of the circle?

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

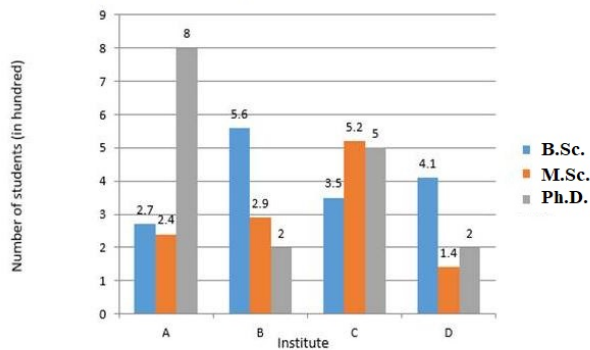
Question ID : 424429870
 Status : Answered
 Chosen Option : 1

Q.6 If $x - y = 13$ and $xy = 25$, then the value of $x^2 - y^2 = ?$

- Ans**
- ✗ 1. $13\sqrt{240}$
 - ✗ 2. $13\sqrt{229}$
 - ✓ 3. $13\sqrt{269}$
 - ✗ 4. $13\sqrt{210}$

Question ID : 424429873
 Status : Answered
 Chosen Option : 3

Q.7 The following graph shows the number of students (in hundreds) in three different courses in four different institutes. Study the graph and answer the question.



What is the total number of students (in hundreds) in M.Sc. course across all institutes?

- Ans**
- ✗ 1. 10.5
 - ✗ 2. 11.5
 - ✓ 3. 11.9
 - ✗ 4. 10.8

Question ID : 424429883
 Status : Answered
 Chosen Option : 3

Q.8 The distance covered by a train in $(x + 1)$ hours is $(x^3 + 1)$ km. What is the speed of the train?

- Ans
- 1. $(x + 1)$ km/h
 - 2. $(x^2 + x + 1)$ km/h
 - 3. $(x^2 - x + 1)$ km/h
 - 4. $(x^3 - 1)$ km/h

Question ID : 424429875
Status : Answered
Chosen Option : 3

Q.9 If $x + y = 4$ and $x^3 + y^3 = 12$, then the value of $x^4 + y^4 = ?$

- Ans
- 1. $\frac{146}{3}$
 - 2. $\frac{146}{9}$
 - 3. $\frac{146}{7}$
 - 4. $\frac{146}{5}$

Question ID : 424429874
Status : Answered
Chosen Option : 2

Q.10 In a set of three numbers, the average of the first two numbers is 7, the average of the last two numbers is 10, and the average of the first and the last numbers is 14. What is the average of the three numbers?

- Ans
- 1. $31/3$
 - 2. $25/4$
 - 3. $29/4$
 - 4. $37/3$

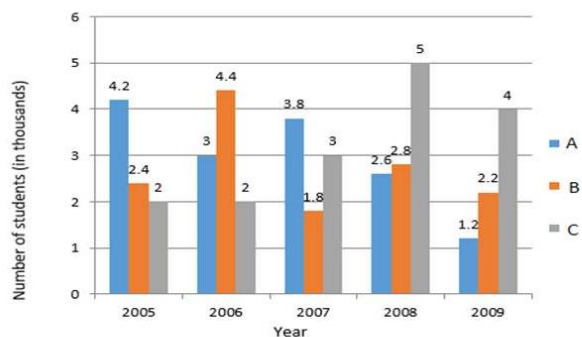
Question ID : 424429863
Status : Answered
Chosen Option : 1

Q.11 What is the area of an equilateral triangle of side $4\sqrt{3}$ cm?

- Ans
- 1. $16\sqrt{3}$ cm²
 - 2. $12\sqrt{3}$ cm²
 - 3. $15\sqrt{3}$ cm²
 - 4. $20\sqrt{3}$ cm²

Question ID : 424429862
 Status : Answered
 Chosen Option : 2

Q.12 The following graph below shows the number of students (in thousands) who were admitted to three different courses in 5 years in a university. Study the graph and answer the question.

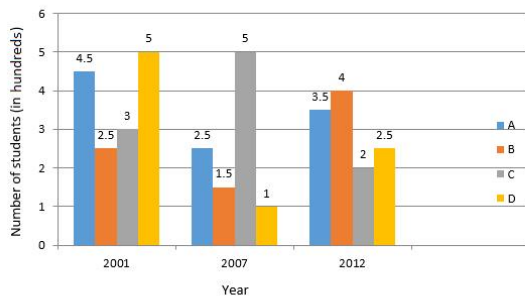


What is the ratio of the number of students who were admitted to course A in the year 2007 to that of students who were admitted to course C in the year 2009?

- Ans
- 1. $\frac{23}{20}$
 - 2. $\frac{19}{20}$
 - 3. $\frac{21}{20}$
 - 4. $\frac{9}{20}$

Question ID : 424429882
 Status : Answered
 Chosen Option : 2

Q.13 The following bar graph shows the number of students (in hundreds) who have opted for different courses A, B, C and D in 3 years in a college. Study the graph and answer the question.



In the year 2007, the average number of students across the four courses is (in hundreds):

- Ans**
- ✓ 1. 2.5
 - ✗ 2. 1.5
 - ✗ 3. 2.2
 - ✗ 4. 2.7

Question ID : 424429881
 Status : Answered
 Chosen Option : 1

Q.14 The value of x , if $2\sin^2 x = 2 - 3\sin x$, is:

- Ans**
- ✓ 1. $\frac{\pi}{6}$
 - ✗ 2. $\frac{\pi}{4}$
 - ✗ 3. $\frac{\pi}{3}$
 - ✗ 4. $\frac{\pi}{2}$

Question ID : 424429880
 Status : Answered
 Chosen Option : 1

Q.15 If the numerator of a fraction is increased by 15% and denominator is decreased by 20%, then the fraction, so obtained, is $\frac{17}{65}$. What is the original fraction?

Ans

✓ 1. $\frac{272}{1495}$

✗ 2. $\frac{267}{1495}$

✗ 3. $\frac{278}{1495}$

✗ 4. $\frac{281}{1495}$

Question ID : 424429865

Status : Answered

Chosen Option : 1

Q.16 At which rate of simple interest does an amount become double in 12 years?

Ans

✗ 1. $7\frac{4}{5}\%$

✗ 2. $7\frac{1}{2}\%$

✗ 3. 8%

✓ 4. $8\frac{1}{3}\%$

Question ID : 424429868

Status : Answered

Chosen Option : 4

Q.17 A person walks a distance from point A to B at 15 km/h, and from point B to A at 30 km/h. If he takes 3 hours to complete the journey, then what is the distance from point A to B?

Ans

✗ 1. 15 km

✓ 2. 30 km

✗ 3. 25 km

✗ 4. 10 km

Question ID : 424429861

Status : Answered

Chosen Option : 2

Q.18 What is the value of $\cot 35^\circ \cot 40^\circ \cot 45^\circ \cot 50^\circ \cot 55^\circ$?

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

Question ID : 424429878
Status : Answered
Chosen Option : 3

Q.19 If two concentric circles are of radii 13 cm and 12 cm, respectively, then the length of the chord of the larger circle which touches the smaller circle is:

- Ans
- 1. 35 cm
 - 2. 10 cm
 - 3. 15 cm
 - 4. 25 cm

Question ID : 424429872
Status : Answered
Chosen Option : 2

Q.20 What will be the area of a circle whose radius is $\sqrt{5}$ cm?

- Ans
- 1. $5\pi \text{ cm}^2$
 - 2. $2\pi \text{ cm}^2$
 - 3. $\pi \text{ cm}^2$
 - 4. $3\pi \text{ cm}^2$

Question ID : 424429869
Status : Answered
Chosen Option : 1

Q.21 If a positive integer 'n' is divisible by 3, 5 and 7, then what is the next larger integer divisible by all these numbers?

- Ans
- 1. $n + 21$
 - 2. $n + 110$
 - 3. $n + 105$
 - 4. $n + 35$

Question ID : 424429876
Status : Answered
Chosen Option : 3

Q.22 What is the value of

$$(9 + 3 - 16 \div 4 + 10) + \{(3 + 5 \times 2 \div 10)\} \times (18 - 4 \text{ of } 5)?$$

- Ans
- 1. 15
 - 2. 5
 - 3. 8
 - 4. 10

Question ID : 424429877
Status : Answered
Chosen Option : 4

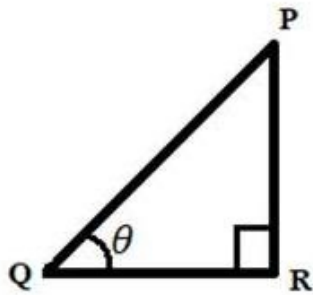
Q.23 A alone can complete a task in 3 days and B alone can complete the same task in 6 days. In how many days can A and B complete it together?

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

Question ID : 424429860
Status : Answered
Chosen Option : 4

Q.24 In the given figure, if $PQ = 13$ cm and $PR = 12$ cm, then the value

of $\sin \theta + \tan \theta = ?$



Ans

1. $\frac{218}{5}$

2. $\frac{216}{65}$

3. $\frac{213}{5}$

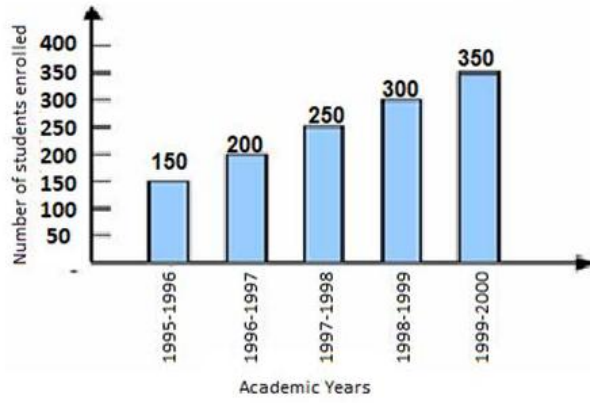
4. $\frac{216}{13}$

Question ID : 424429879

Status : Answered

Chosen Option : 2

Q.25 Study the graph and answer the question that follows.



What is the ratio of enrolment during 1995 - 1996 to the enrolment during 1998 - 1999?

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

Question ID : 424429884

Status : Answered

Chosen Option : 3