

**Q.1** P can work thrice as fast as Q. Working independently, Q can complete a task in 24 days. In how many days can P and Q together finish the same task?

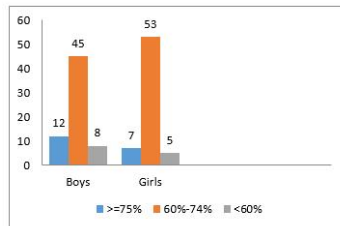
- Ans**
- ☒ 1. 4
  - ☒ 2. 5
  - ☒ 3. 8
  - ☒ 4. 6

Question ID : 8161611420

Status : **Answered**

Chosen Option : 4

**Q.2** The given bar chart shows the number of students in a class who have secured marks in three ranges:  $\geq 75\%$ , 60%-74% and  $< 60\%$ .



What is the ratio of percentages of boys and girls who got marks from 60% to 74%?

- Ans**
- ☒ 1. 64.12 : 88.23
  - ☒ 2. 62.78 : 82.67
  - ☒ 3. 69.23 : 81.53
  - ☒ 4. 67.54 : 87.45

Question ID : 8161611444

Status : **Answered**

Chosen Option : 3

**Q.3** If  $\sin\theta - \cos\theta = \frac{1}{29}$  find the value of  $\sin\theta + \cos\theta$ .

- Ans**
- ☒ 1.  $\frac{22}{29}$
  - ☒ 2.  $\frac{42}{29}$
  - ☒ 3.  $\frac{2}{29}$
  - ☒ 4.  $\frac{41}{29}$

Question ID : 8161611439

Status : **Answered**

Chosen Option : 4

Q.4 If  $a + b + c + d = 2$ , then the maximum value of  $(1 + a)(1 + b)(1 + c)(1 + d)$  is \_\_\_\_\_.

Ans

- ✗ 1.  $\frac{91}{9}$
- ✗ 2.  $\frac{63}{22}$
- ✗ 3.  $\frac{54}{13}$
- ✓ 4.  $\frac{81}{16}$

Question ID : 8161611434

Status : Answered

Chosen Option : 4

Q.5 The sum of the number of male and female students in an institute is 100. If the number of male students is  $x$ , then the number of female students becomes  $x\%$  of the total number of students. Find the number of male students.

Ans

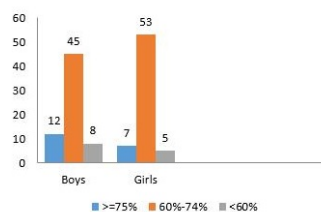
- ✗ 1. 65
- ✓ 2. 50
- ✗ 3. 60
- ✗ 4. 45

Question ID : 8161611425

Status : Answered

Chosen Option : 2

Q.6 The given bar chart shows the number of students in a class who have secured marks in three ranges:  $\geq 75\%$ ,  $60\%-74\%$  and  $< 60\%$ .



From the given information, identify the per cent of boys who got distinction.

Ans

- ✗ 1. 15.29%
- ✓ 2. 18.46%
- ✗ 3. 16.78%
- ✗ 4. 13.98%

Question ID : 8161611442

Status : Answered

Chosen Option : 2

Q.7 If the present amount is ₹87,750 with 8% rate of interest in four years, then what was the principal amount?

- Ans
- ☐ 1. ₹69,345.6
  - ☐ 2. ₹78,456.34
  - ☐ 3. ₹56,896.98
  - ☒ 4. ₹66,477.2

Question ID : 8161611428

Status : Answered

Chosen Option : 4

Q.8 If a positive integer  $n$  is divided by 7, the remainder is 2. Which of the numbers in the options yields a remainder of 0 when it is divided by 7?

- Ans
- ☐ 1.  $n + 3$
  - ☒ 2.  $n + 5$
  - ☐ 3.  $n + 2$
  - ☐ 4.  $n + 1$

Question ID : 8161611436

Status : Answered

Chosen Option : 2

Q.9 If the perimeter and length of a rectangle are in the ratio 6:1 and the area of the rectangle is  $288 \text{ cm}^2$ . Find the length of the rectangle.

- Ans
- ☒ 1. 12 cm
  - ☐ 2. 10 cm
  - ☐ 3. 8 cm
  - ☐ 4. 9 cm

Question ID : 8161611422

Status : Answered

Chosen Option : 1

Q.10

Find the value of  $\sqrt{30 + \sqrt{30 + \sqrt{30 + \sqrt{30 + \dots \dots \dots \infty}}}}$

- Ans
- ☐ 1. 4
  - ☒ 2. 6
  - ☐ 3. 5
  - ☐ 4. 3

Question ID : 8161611435

Status : Answered

Chosen Option : 2

**Q.11** A dozen pairs of gloves worth ₹600 are available at a discount of 10%. Find out how many pairs of gloves can be bought for ₹270.

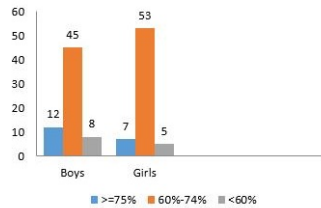
- Ans**
- ☒ 1. Seven
  - ☒ 2. Four
  - ☒ 3. Six
  - ☒ 4. Five

Question ID : 8161611424

Status : **Answered**

Chosen Option : 3

**Q.12** The given bar chart shows the number of students in a class who have secured marks in three ranges:  $\geq 75\%$ ,  $60\%-74\%$  and  $< 60\%$ .



Boys	12	45	8
Girls	7	53	5

What is the total number of girls and boys?

- Ans**
- ☒ 1. 120
  - ☒ 2. 130
  - ☒ 3. 110
  - ☒ 4. 140

Question ID : 8161611441

Status : **Answered**

Chosen Option : 2

**Q.13** Find the value of  $\sin(60 + \theta) - \cos(30 - \theta)$ .

- Ans**
- ☒ 1. -1
  - ☒ 2. 1
  - ☒ 3. 0
  - ☒ 4.  $\frac{1}{2}$

Question ID : 8161611438

Status : **Answered**

Chosen Option : 3

Q.14 The incomes of two persons P and Q are in the ratio 5 : 6. If each of them saves ₹200 per month, the ratio of their expenditures is 3 : 4. Find the income of Q.

- Ans
- ☐ 1. ₹800
  - ☐ 2. ₹750
  - ☐ 3. ₹740
  - ☒ 4. ₹600

Question ID : 8161611427  
Status : Answered  
Chosen Option : 4

Q.15 A person covers 700 m distance in 6 minutes. What is his speed in km/h?

- Ans
- ☐ 1. 3.45 km/h
  - ☒ 2. 7 km/h
  - ☐ 3. 6 km/h
  - ☐ 4. 4.23 km/h

Question ID : 8161611421  
Status : Answered  
Chosen Option : 2

Q.16 Two circles touch each other externally. The distance between their centres is 8 cm. If the radius of one circle is 3 cm, then the radius of the other circle is:

- Ans
- ☒ 1. 5 cm
  - ☐ 2. 4 cm
  - ☐ 3. 3 cm
  - ☐ 4. 6 cm

Question ID : 8161611429  
Status : Answered  
Chosen Option : 1

Q.17 If  $p + \left(\frac{1}{p}\right) = 2$  find the value of  $p \times p \times p$

- Ans
- ☐ 1. 8
  - ☐ 2. 4
  - ☒ 3. 1
  - ☐ 4. 2

Question ID : 8161611433  
Status : Answered  
Chosen Option : 3

**Q.18** The average of four consecutive even numbers is 27. By adding which number does the average become 28?

- Ans ☒ 1. 32  
☒ 2. 30  
☒ 3. 33  
☒ 4. 29

Question ID : 8161611423

Status : **Answered**

Chosen Option : 1

**Q.19** The selling price of a book, including the sales tax, is ₹956.34. The rate of sales tax is 10%. If the shopkeeper has made a profit of 15%, then the cost price of the book is:

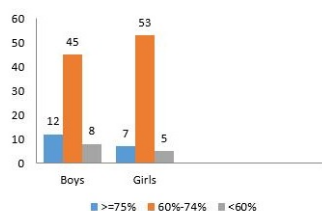
- Ans ☒ 1. ₹836  
☒ 2. ₹797.34  
☒ 3. ₹845.98  
☒ 4. ₹756

Question ID : 8161611426

Status : **Not Answered**

Chosen Option : --

**Q.20** The given bar chart shows the number of students in a class who have secured marks in three ranges:  $\geq 75\%$ , 60%-74% and  $< 60\%$ .



From the given information, identify how much per cent of girls got distinction.

- Ans ☒ 1. 18.49%  
☒ 2. 14.28%  
☒ 3. 17.86%  
☒ 4. 10.76%

Question ID : 8161611443

Status : **Answered**

Chosen Option : 4

**Q.21** The wheel of a car has 210 cm diameter. How many revolutions per minute must the wheel make so that the speed of the car is kept at 120 km/h?

- Ans ☒ 1. 245  
☒ 2. 289  
☒ 3. 326.42  
☒ 4. 303.03

Question ID : 8161611430

Status : **Answered**

Chosen Option : 4

Q.22 Find the perimeter of a right angle triangle whose sides have sizes of 5 cm and 12 cm.

- Ans
- ☒ 1. 18 cm
  - ☒ 2. 30 cm
  - ☒ 3. 17 cm
  - ☒ 4. 25 cm

Question ID : 8161611432

Status : Answered

Chosen Option : 2

Q.23 The perimeter of an isosceles triangle is 125 cm. If the base is 33 cm, find the length of the equal sides.

- Ans
- ☒ 1. 46 cm
  - ☒ 2. 34 cm
  - ☒ 3. 32 cm
  - ☒ 4. 42 cm

Question ID : 8161611431

Status : Answered

Chosen Option : 1

Q.24 Find  $x$  if  $\sin x = -\frac{1}{2}$ .

- Ans
- ☒ 1.  $\frac{5\pi}{6}$
  - ☒ 2.  $\frac{7\pi}{6}$
  - ☒ 3.  $\frac{\pi}{6}$
  - ☒ 4.  $\frac{13\pi}{6}$

Question ID : 8161611440

Status : Answered

Chosen Option : 2

Q.25 Find  $x$ , if  $30\%$  of  $400 + x\%$  of  $70 = 25\%$  of  $536$ .

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

Question ID : 8161611437

Status : Answered

Chosen Option : 4