

# **APTI MAVERICKS**

Workshop on Aptitude

The difference between the value of the number increased by 32% and the value of the number decreased by 28% is 180. Find the number.

[IB ACIO Grade 2 – 2024]

- A. 320
- B. 280
- C. 300
- D. 260

27% of a number exceeds 13% of the same number by 56. What is the value of the number? [IB ACIO Grade 2 – 2024]

- A. 400
- B. 380
- C. 360
- D. 420

A, B and C can complete a work in  $x$ ,  $1.5x$  and  $2x$  days respectively. If they complete the work together. In what ratio they should be paid? [CDS 2022]

A. 2 : 3 : 4

B. 6 : 4 : 3

C. 3 : 2 : 1

D. 4 : 3 : 2

P, Q and R can complete a work in 25, 40 and 60 days respectively. If they complete the work together, in what ratio should they be paid? [E-LITMUS 2023]

A. 24 : 15 : 10

B. 16 : 14 : 13

C. 20 : 15 : 9

D. 5 : 8 : 12

The total surface area of a hemisphere is  $64.57 \text{ cm}^2$ . Find its curved surface area. [AMCAT 2023]

- A.  $64.57 \text{ cm}^2$
- B.  $53.44 \text{ cm}^2$
- C.  $43.04 \text{ cm}^2$
- D.  $33.04 \text{ cm}^2$

The total surface area of a solid hemisphere is  $675\pi$  cm<sup>2</sup>.  
Find its curved surface area of the solid hemisphere.

[COCUBES 2023]

- A.  $500\pi$  cm<sup>2</sup>
- B.  $312.5\pi$  cm<sup>2</sup>
- C.  $480\pi$  cm<sup>2</sup>
- D.  $450\pi$  cm<sup>2</sup>

An aeroplane flies along the four sides of a square field at the speeds of 150 kmph, 300 kmph, 450 kmph and 600 kmph. Find the average speed of the plane.

[SSC GD 2022]

- A. 350 kmph
- B. 288 kmph
- C. 228 kmph
- D. 225 kmph



There is a square field, having area  $37.1 \text{ km sq}$ . If a person starts his journey from a corner with speed  $20 \text{ m/s}$  but when changes his direction, his speed also changes with  $30 \text{ m/s}$ ,  $40 \text{ m/s}$  and  $60 \text{ m/s}$  respectively. Find the average speed when he completes one round.

[MERCER METTL 2022]

- A.  $37.5 \text{ m/s}$
- B.  $40 \text{ m/s}$
- C.  $32 \text{ m/s}$
- D.  $28 \text{ m/s}$

The average of 11 consecutive odd numbers is 37. What is the difference between the largest number and the smallest number? [IB ACIO Grade 2 – 2024]

- A. 21
- B. 23
- C. 20
- D. 25

The average of 29 consecutive even numbers is 446. What is the difference between the largest number and the smallest number? [IB ACIO Grade 2 – 2024]

- A. 58
- B. 56
- C. 60
- D. 62

Excluding stoppages, the speed of a bus is 152 kmph and including stoppages, the speed of the same bus is 114 kmph. For how many minutes the bus stop per hour?

[IB ACIO Grade 2 – 2024]

- A. 15 minutes
- B. 11 minutes
- C. 9 minutes
- D. 10 minutes

Excluding stoppages, the speed of a bus is 78 kmph and including stoppages, the speed of the same bus is 65 kmph. For how many minutes the bus stop per hour?

[TCS 2023]

- A. 12
- B. 9
- C. 10
- D. 15

Find the positive square root of  $92 - 24\sqrt{6 - 4\sqrt{2}}$  ?

[IB ACIO Grade 2 – 2024]

A.  $6 + 2\sqrt{2}$

B.  $6 - 2\sqrt{2}$

C.  $8 - 2\sqrt{2}$

D.  $8 - 4\sqrt{2}$

Find the positive square root of  $207 - 54\sqrt{6 + 4\sqrt{2}}$  ?

[IB ACIO Grade 2 – 2024]

A.  $9 - 3\sqrt{3}$

B.  $9 - 3\sqrt{2}$

C.  $9 - 2\sqrt{3}$

D.  $9 - 4\sqrt{2}$

A1 is 19 times more than A2, then A2 is what percent less than A1? [IB ACIO Grade 2 – 2024]

- A. 85%
- B. 105%
- C. 95%
- D. 100%



A1 is 24 times more than A2, then A2 is what percent less than A1? [IB ACIO Grade 2 – 2024]

- A. 86%
- B. 106%
- C. 96%
- D. 108%

222/37

555/37

888/37

999/37

444/37

666/37

3330/37

1110/37

Find  $\frac{700\%}{70\%} = ?$

A. 70%

B. 10%

C. 1000%

D. None

Find  $\frac{9900\%}{900\%} = ?$

A. 900%

B. 10%

C. 1100%

D. None

In a school, the average height of the students of the tenth standard is 100 cm. The average height of the boys is 118 cm, whereas the average height of the girls is 95 cm. What is the number of girls in the class?

[SSC MTS 2023]

- A. 72
- B. 63
- C. 54
- D. 36

The average height of the workers in a workshop is Rs. 7500. If the average monthly salary of 7 technicians is Rs. 18000 and the average monthly salary of the rest of the workers is Rs. 6800. Then find the total number of workers in the workshop

- A. 122
- B. 125
- C. 118
- D. 112

If the average marks of girls in an examination is 75 and that of the boys is 64. The average score of the whole class is 68.4. What is the percentage of the number of girls in the class?

- A. 50%
- B. 66.66%
- C. 40%
- D. 45%



If the average weight of boys in a class is 69.3 kg and that of the girls of the same class is 59.4. The average weight of the whole class is 63.8 kg. What is the percentage of the number of boys in the class?

- A. 44.44%
- B. 55.55%
- C. 45%
- D. 40%

Average of 12 numbers is 64. If 14 is subtracted from the first five numbers and 12 is added in the next seven numbers, then what will be the new average?

[ICAR TECHNICIAN 2023]

- A. 65.89
- B. 66.17
- C. 65.17
- D. 64.19

The average of  $n$  number is 45. If 60% of the numbers are increased by 5 each and the remaining numbers are decreased by 10 each, then what is the average of the numbers so obtained? [SSC CGL MAINS 2022]

- A. 42
- B. 43
- C. 46
- D. 44