

1. A 30% loss on cost price is what percent loss on selling price?

1. 30%
2. 20%
3. 15%
4. None of these

Answer: Option D

Let CP = 100 ; SP=70

Loss= $30/70 \times 100 = 42.85\%$

2. A, B and C hire a taxi for Rs. 2400 for one day. A, B and C used the car for 6 hours, 8 hours and 10 hours respectively. How much did C pay?

1. Rs. 800
2. Rs. 1000
3. Rs. 600
4. Rs. 1200

Answer: Option B

Let total fair be = 2400 ;

Therefore c share = $10/24 \times 2400 = 1000$

3. The ratio of investments of A and B is 8 : 7 and the ratio of their yearend profits is 20 : 21. If B invested for 12 months, then find the period of investment of A:

1. 6 months
2. 8 months
3. 10 months
4. 12 months

Answer: Option C

Let A invest for x months ; A = 8x months,

B = $7 \times 12 = 84$ months

$8x/84 = 20/21$

$\Rightarrow x = 10$

4. What percent is 2 minutes 24 seconds of an hour?

1. 6%
2. 2%
3. 4%
4. 8%

Answer: Option C

$\% = 144/60 \times 60 = 4\%$

5. Evaluate: $3 \cos 80^\circ \operatorname{cosec} 10^\circ + 2 \cos 59^\circ \operatorname{cosec} 31^\circ$

1. 1
2. 3
3. 2
4. 5

Answer: Option D

$$\begin{aligned} & 3 \cos 80^\circ \cdot \operatorname{Cosec} 10^\circ + 2 \cos 59^\circ \cdot \operatorname{cosec} 31^\circ \\ &= 3 \cos (90^\circ - 10^\circ) \cdot \operatorname{Cosec} 10^\circ + 2 \cos (90^\circ - 31^\circ) \cdot \operatorname{Cosec} 31^\circ \\ &= 3 \sin 10^\circ \cdot \operatorname{Cosec} 10^\circ + 2 \sin 31^\circ \cdot \operatorname{cosec} 31^\circ \\ &= 3 + 2 = 5 \end{aligned}$$

6. The total cost of 8 buckets and 5 mugs is Rs. 92 and the total cost of 5 buckets and 8 mugs is Rs. 77. Find the cost of 2 mugs and 3 buckets.

1. Rs. 35
2. Rs. 70
3. Rs. 30
4. Rs. 38

Answer: Option A

CP of 1 bucket = Rs. X

CP of 1 mug = Rs. Y

$$\therefore 8x + 5y = 92 \dots\dots (i)$$

$$5x + 8y = 77 \dots\dots (ii)$$

By equation (i) $\times 5$ – equation (ii) $\times 8$.

$$\begin{aligned} & 40x + 25y - 40x - 64y \\ &= 460 - 616 \Rightarrow -39y = -156 \Rightarrow y = 4 \end{aligned}$$

From equation (i),

$$8x + 20 = 92 \Rightarrow 8x = 92 - 20 = 72 \Rightarrow x = 9$$

\therefore CP of 2 mugs and 3 buckets

$$= 2 \times 4 + 3 \times 9 = 8 + 27 = \text{Rs. } 35$$

7. If $\frac{4x}{3} + 2P = 12$ for what value of P, $x = 6$?

1. 6
2. 4
3. 2
4. 1

Answer: Option C

When $x = 6$, $(4 \times 6)/3 + 2P = 12$

$$\Rightarrow 8 + 2P = 12$$

$$\Rightarrow 2P = 12 - 8 = 4$$

$$\Rightarrow P = 2$$

8. What number must be added to the expression $16a^2 - 12a$ to make it a perfect square?

1. $9/4$
2. $11/2$
3. $13/2$
4. 16

Answer: Option A

$$a^2 - 2ab + b^2 = (a-b)^2$$

$$\therefore 16a^2 - 12a = (4a)^2 - 2 \cdot 4a \cdot 3/2$$

Hence, on adding $(3/2)^2 = 9/4$, expression will be a perfect square.

9. The straight line $2x + 3y = 12$ passes through:

1. 1st, 2nd and 3rd quadrant
2. 1st, 2nd and 4th quadrant
3. 2nd, 3rd and 4th quadrant
4. 1st, 3rd and 4th quadrant

Answer: Option B

The usual way to solve these type of questions is to put $x = 0$ once and find y coordinate. This would represent the point where the line cuts the Y axis.

Similarly put $y = 0$ once and find x coordinate. This would represent the point where the line cuts the X axis. Then join these points and you will get the graph of the line.

So when we put $x = 0$ we get $y = 4$.

When we put $y = 0$ we get $x = 6$.

So when we join these points we see that we get a line in 1st quadrant, which when extended both sides would go to 4th and 2nd quadrants. So option B.

10. In $\triangle ABC$, $\angle A + \angle B = 65^\circ$, $\angle B + \angle C = 140^\circ$, then find $\angle B$.

1. 40°
2. 25°
3. 35°
4. 20°

Answer: Option B

$$\angle A + \angle B = 65^\circ$$

$$\therefore \angle C = 180^\circ - 65^\circ = 115^\circ$$

$$\angle B + \angle C = 140^\circ$$

$$\therefore \angle B = 140^\circ - 115^\circ = 25^\circ$$

1. Find the odd man out. 1, 3, 9, 12, 19, 29

A. 12

B. 9

C. 1

D. 3

Here is the answer and explanation

Answer : Option A

Explanation :

12 is an even number. All other given numbers are odd

2. Find the odd man out. 1, 8, 27, 64, 125, 196, 216, 343

A. 64

B. 196

C. 216

D. 1

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Here is the answer and explanation

Answer : Option B

Explanation :

The pattern is 1^3 , 2^3 , 3^3 , 4^3 , 5^3 , 6^3 , 7^3 .

196 is not a perfect cube

3. Find the odd man out. 15, 25, 30, 51, 85, 90, 115

A. 15

B. 25

C. 51

D. 90

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Here is the answer and explanation

Answer : Option C

Explanation :

All except 51 are multiples of 5

7. Find the odd man out. 362, 482, 551, 263, 344, 284

- A. 362 B. 482
C. 551 D. 344

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Here is the answer and explanation

Answer : Option D

Explanation :

In all numbers except 344, the product of first and third digits is the middle digit.

9. Find the odd man out. 1, 5, 11, 17, 23, 29

- A. 29 B. 17
C. 11 D. 1

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Here is the answer and explanation

Answer : Option D

Explanation :

All given numbers except 1 are prime numbers.

One is not a prime number because it does not have two factors. It is divisible by only 1

12. Find the odd man out. 1, 4, 9, 17, 25, 36, 49

- A. 1 B. 9
C. 17 D. 49

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Here is the answer and explanation

Answer : Option C

Explanation :

The pattern is 1^2 , 2^2 , 3^2 , 4^2 , 5^2 , 6^2 , 7^2

But, instead of 4^2 , 17 is given

14. Find the odd man out. 18, 16, 12, 24, 11, 34, 46

A. 16 B. 46

C. 16 D. 11

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Here is the answer and explanation

Answer : Option D

Explanation :

11 is the only odd number in the given series

15. Find the odd man out. 1, 27, 216, 512, 1024, 1331

A. 1024 B. 512

C. 27 D. 1

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Here is the answer and explanation

Answer : Option A

Explanation :

All given numbers except 1024 are perfect cubes

1. A person crosses a 600 m long street in 5 minutes. What is his speed in km per hour?

[A.](#) 3.6

[B.](#) 7.2

[C.](#) 8.4

[D.](#) 10

Answer: Option B

Explanation:

$$\begin{aligned}\text{Speed} &= \left(\frac{600}{5 \times 60} \right) \text{m/sec.} \\ &= 2 \text{ m/sec.}\end{aligned}$$

Converting m/sec to km/hr (see [important formulas](#) section)

$$\begin{aligned}&= \left(2 \times \frac{18}{5} \right) \text{km/hr} \\ &= 7.2 \text{ km/hr.}\end{aligned}$$

3. If a person walks at 14 km/hr instead of 10 km/hr, he would have walked 20 km more. The actual distance travelled by him is:

- [A.](#) 50 km
- [B.](#) 56 km
- [C.](#) 70 km
- [D.](#) 80 km

Answer: Option A

Explanation:

Let the actual distance travelled be x km.

$$\begin{aligned}\text{Then, } \frac{x}{10} &= \frac{x + 20}{14} \\ \Rightarrow 14x &= 10x + 200 \\ \Rightarrow 4x &= 200 \\ \Rightarrow x &= 50 \text{ km.}\end{aligned}$$