

1. **(C) juggernaut: crush**

Quisling (betrayal, who betray): betray

Taunt (to provoke): provoke

Juggernaut (over powerful, destructive object, who destroy): crush (to destroy)

Inception (commencement, beginning): termination (opposite meaning)

Obstinate (firmly or stubbornly adhering to one's purpose, opinion): preserve (to keep)

Hence close relation to given word is (C) juggernaut: crush

2. **(B) yielding**

Recalcitrant- hard to deal, not obedient

Yielding - flexible, hence the opposite word.

3. **(D) New**

Novice means a person new to some work or circumstances.

4. **(A) an eloquent**

The second clause describes the discourses of a person as informative and inspirational, which gives us a clue that the missing blank should relate to informative and inspirational discourses. An eloquent speaker is the one whose discourses are informative and inspirational. Hence (A) is the answer.

5. **(B) 0.38**

$$P(A_{Truth}) = 0.7, P(B_{Truth}) = 0.8 \Rightarrow P(A_{Lie}) = 0.3, P(B_{Lie}) = 0.2$$

Condition for contradiction: If A true then B lie or if A lie B true.

$$\text{Thus answer is } 0.7 \times 0.2 + 0.8 \times 0.3 = 0.38$$

6. **(A) has never been applied, Congress is required to call a convention to consider possible amendments to the document when formally asked to do so**

Corrections are

was never applied=>has never applied

has been required=> is required

for considering=> to consider

7. **(B) 5min. late**

Total travel time including rest time according to watch at home = from 2:35 pm to 4:00pm. =1hr 25 min

Total travel time excluding rest time = 1hr 25 min - 25 min = 1hr = 60min

The speed during return to home was twice as that while going from home and hence the time taken by the person to go office from home was twice that of going home from office.

Thus ratio of time for going to office and coming from office = 2: 1 and total time taken only for travelling = 60 min. $\Rightarrow 3x = 60$ min and $2x = 40$ min.

He took 40 min to go to office. Thus the time while he reached at office must be 2:35+40 min=3:15. But the time at office watch was 3:10. Hence the office watch was 5 min late.

8. **(B) 28 ltr.**

Let original milk in container is x lt.

After 4th operation quantity of milk present in the container = $x(1 - 7/x)^4$ lt. According to the question, the ratio of quantity of milk to water after 4th operation is 81: 47.

Thus, ratio of milk after 4th operation to the original milk amount = $(x(1 - 7/x)^4)/x = 81/(81 + 47) \Rightarrow (1 - 7/x)^4 = (3/4)^4 \Rightarrow x = 28lt$

9. **(C) 440**

Considering relative speed, as A meets C every 88 seconds, then if C is at a constant point then A covers the circular track in each 88 seconds. Same for B also which covers the distance in 110 seconds.

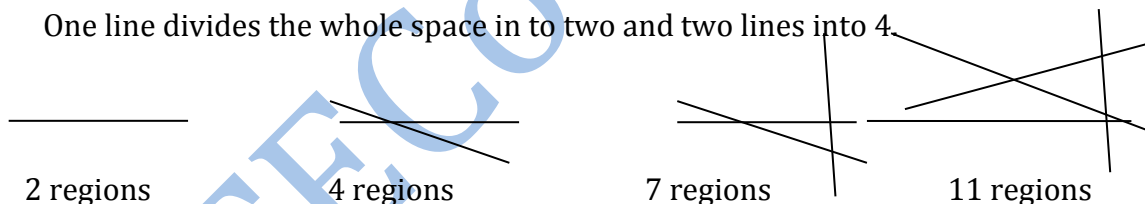
With respect to C, speed of A, $2 * \pi * r/88$ and that of B, $2 * \pi * r/110$. Relative speed of A and B is $(2 * \pi * r/88 - 2 * \pi * r/110) = 2 * \pi * r/t$

Where t is the time after which A meets B.

Thus $(1/88) - (1/110) = 1/t \Rightarrow t = 440$

10. **(C) 79**

One line divides the whole space in to two and two lines into 4.



If no two lines are parallel and no three are concurrent, then 3rd line can cut the existing lines at most two places or three extra spaces are added. Thus 3 lines divide the whole space in to $4 + 3 = 7$. One more line can intersect at most 3 points and will provide additional 4 spaces. The nth line can increase the region by k if and only if it divides k of the old regions and it divides k regions if and only if it intersects the existing lines at atmost $k - 1$ points.

1 line = 2 region

2 lines = $2 + 2 = 4$ regions = $1 + 1$

3 lines = $2 + 2 + 3 = 7$ regions = $1 + 1 + 2$

4 lines = $2 + 2 + 3 + 4 = 11$ regions = $1 + 1 + 2 + 3$

n lines = $2 + 2 + 3 + 4 + \dots + n$ regions = $1 + 1 + 2 + \dots + n - 1 + n$ regions = $S_n + 1$

Where S_n is sum of n natural numbers

$n = 12 \Rightarrow$ number of non-overlapping regions inside the circle (as all intersects are inside the circle, the total regions are inside the circle) = $1 + S_{12} = 1 + 78 = 79$