

ALL INDIA PRELIMS TEST SERIES - 2020

CSAT PART-2

ANSWER KEY

Ans:1)(a)

Explanation:

Statement 1 is correct.

Refer the following lines, "Better would be "social philosopher," or, better still, the old term "political economist," since the scope and range of Sen's work is directly comparable to that of such eighteenth- and nineteenth-century practitioners of political economy as Adam Smith, John Stuart Mill, and Karl Marx."

Here it is mentioned that political economist is a much more appropriate term to describe him rather than economist as his scope of work is directly comparable to previously established practitioners of political economy.

Statement 2 is incorrect.

Though the statement is factually correct, it is not mentioned in the passage, hence is not to be considered.

Ans:2)(b)

Explanation:

Option (a) is incorrect. In the passage it is mentioned that "People should get the same, or be treated the same, or be treated as equals, in some respect." not all respects, hence it is wrong.

Option (b) is correct.

This line "Egalitarian doctrines tend to rest on a background idea that all human persons are equal in fundamental worth or moral status" clearly points out that Equality in moral status or fundamental worthiness is the main idea behind Egalitarian concept.

Option (c) is incorrect.

The statement is not relevant to the passage, as the information in the statement is not discussed in the passage, hence it is to be discarded.

Option (d) is incorrect.

It is not mentioned in the passage that the Egalitarian doctrine is desired because it is a protean doctrine. Hence it is incorrect.

Ans:3)(d)

Explanation:

Statement 1 is incorrect.

Refer the lines from the passage, "Engineers solve this heat-generating problem in most mechanical systems by using fans, heat sinks, and radiators, which means that you've got all of this dedicated cooling infrastructure that takes up space and adds mass."

Here the shortcoming of using the cooling system based on heat sinks is discussed not arguing that it is the best solution. Hence it is incorrect

Statement 2 is incorrect.

The statement is not relevant to the passage, nor is it discussed, so it can be discarded.

Ans:4)(c)

Explanation: This is a trick question as what we need to figure out are incorrect statements.

Statement 1 is incorrect

Refer the following lines from the passage, "Debt waiver can bring some relief to selected groups of farmers in the short run, but has negative effects on fiscal deficit of States, credit allocation and credit discipline of borrowers and also creates a moral hazard problem."

Here it is explained that loan waiver has negative impacts on various levels and it creates additional problems as well.

Hence the statement is incorrect.

Statement 2 is incorrect.

Refer the following lines from the passage, "The Commission, therefore, is of the considered view that farm loan waiver is not a solution to address agrarian problems but need to address structural and institutional deficiencies in the sector by undertaking comprehensive reforms in agricultural

marketing and trade policies, logistics and infrastructure and institutional arrangements.”

Here it is mentioned that loan waiver is not providing sufficient relief to the farmers as well and there is no mention of short term reliefs.

Hence the statement is incorrect.

Ans:5)(d)

Explanation:

Option (a) is incorrect, that is not the reason for child marriage as per the passage.

Option (b) is incorrect, there is nothing mentioned about tradition or culture in the passage, so it can be discarded.

Option (c) is incorrect, the statistical values are proof that child marriage is rampant in the area, not its cause

Option (d) is correct, the reason for child marriage is explained in the following lines, “Poverty is a major driver of child marriage in Niger, bringing with it the hope of economic prosperity and an increase in social status for both girls and their parents.” This is given in option (d).

Ans:6)(b)

Explanation:

Statement 1 is incorrect.

Refer the following lines, “The first escalation into a trade war would be a continued spiral of retaliatory measures imposed on trading partners with the purpose of harming the trading partners’ possibilities to export into the home market. The most important channel of protectionist trade measures would run through price effects, impacting households through the real wage channel.”

The statement is contradicting the claim made by the passage that the households will be affected by such a trade war. Hence it is incorrect.

Statement 2 is correct.

Refer the following line, “Indeed, focussing on the recent increases in tariffs, Amiti et al. find that the full incidence for the US economy falls on consumers and leads to a reduction of real income in the amount of USD 1.4 billion per month (efficiency loss) plus USD 3

billion per month in added tax costs that become revenue for the government.”

The study by Amiti et al. shows that while the consumers will suffer a loss from the increased tariffs, the government will benefit from it due to increase in tax revenue. This is explained in the statement and it is correct.

Ans:7)(d)

Explanation:

Option (a) is incorrect, the authors says virtue is a desirable trait, he does not say that habit is an undesirable trait. Hence it is wrong.

Option (b) is incorrect. Refer the lines from the passage “To possess a virtue is to be a certain sort of person with a certain complex mindset.” This line does not mean that the reverse is valid, hence the statement is wrong.

Option (c) is incorrect. Refer to the following line from the passage “If such actions are done merely because the agent thinks that honesty is the best policy, or because they fear being caught out, rather than through recognising “To do otherwise would be dishonest” as the relevant reason, they are not the actions of an honest person.”

The statement contradicts what is discussed in these lines, hence it is incorrect.

Option (d) is correct. The statement can be inferred from these lines ‘An honest person cannot be identified simply as one who, for example, practices honest dealing and does not cheat.”

Ans:8)(b)

Explanation:

Statement 1 is incorrect.

Refer the following line, “While most of us are aware that women are often paid less than men in the same occupation,”

In the opening sentence it is already established that the scenario of gender gap is a known fact, so it’s not a myth,

Also since the author has established it as a fact that gender gap is a real thing and it exists, there is no reason for an established fact to be validated, hence it is incorrect.

Statement 2 is correct.

Refer to the following line, “And male-dominated occupations have even higher wage premiums for men” The line is directly mentioned in the statement.

Ans:9)(b)

Explanation:

While options a, c, and d are challenges faced by India’s Mars Orbiter Mission (MOM) as explained in the 2nd passage, option(b) clearly stands out, as research in the fields of mineralogy and morphology are not described in the passage as challenges but as the outcomes of MOM.

Ans:10)(d)

Explanation:

Available food grains is enough to feed 192 people for 46 days or 46×192 people for a day $\rightarrow 8832$ people for a day.
For 128 people $\rightarrow \frac{8832}{128} = 69$ days.

Ans:11)(a)

First let's find out the values of x and y.

$$2x+y = 100 - (12+16+10) = 62 \text{ ---(1)}$$

$$x+y = 100 - (6+24+19) = 51 \text{ ---(2)}$$

Subtract (1) from (2), we get, $x = 11$ and $y = 40$

$$\text{Mean of the frequency distribution of series I} = \frac{(12 \times 15) + (16 \times 25) + (10 \times 35) + (22 \times 45) + (40 \times 55)}{100} = 41.2$$

$$\text{Mean of the frequency distribution of series II} = \frac{(6 \times 15) + (24 \times 25) + (19 \times 35) + (40 \times 45) + (11 \times 55)}{100} = 37.6$$

$$\text{Difference} = 41.2 - 37.6 = 3.6$$

Ans:12)(b)

Explanation:

Pool < Pond and Pond < Bay \rightarrow Pool < Bay
Bay is larger than Pond, Pool and Canal and Pond is larger than Pool. But nothing else can be deducted from the given data. pond < Bay and Canal < Bay does not mean that pond = canal.

Ans:13)(c)

Explanation:

Black T shirts = 135

Red T Shirts = 60

$$\text{Size L red T shirts} = \frac{25}{100} \times 60 = 15$$

$$\text{Size S black T shirts} = \frac{20}{100} \times 135 = 27$$

$$\text{Size M black T shirts} = \frac{(100 - (20 + 23))}{100} \times 135 = 77$$

Total cases in which discount can be availed = $15 + 27 + 77 = 119$

$$\text{As a \%} = \frac{119}{195} \times 100 = 61\%$$

Ans:14)(d)

Explanation:

Marks required to pass = $32 + 22 = 54$

Now 54 is 45% of total marks (lets call it X)

$$\text{So, } \frac{45}{100} \times X = 54$$

$$X = \frac{54 \times 100}{45} = 120$$

Ans:15)(a)

Explanation:

Total distance = $(19 \times 60) + 60 + (2 \times 1000) = 3200$ m

Speed of the train = 90 km/hr = $90 \times (5/18) = 25$ m/s

Thus, the time taken = $3200/25 = 128$ seconds = 2 minute 8 seconds

Ans:16)(d)

Explanation:

Here, the relative speed of the express train will be calculated wrt the position of man as the train took 18 seconds to pass him.

Relative speed = $360/18 = 20$ m/s

Converting it in to Km/hr, $20 \times (18/5) = 72$ km/hr

Using the concept of relative speed,

speed of the express train = $72 + 72 = 144$ km/hr

Ans:17)(c)

Explanation:

Since the number should be divisible by 5, the last digit has to be 5.

Hence, the number will be of the form $_ _ _ 5$.

Thus, the No. of possible numbers without repetition = ${}^5C_1 \times {}^4C_1 \times {}^3C_1 = 60$

Ans:18)(b)

Method 1:

If there are n people in a group, The first person shakes hands with a total of $(n-1)$ persons, the second with $(n-2)$ persons and so on.

$$\begin{aligned} \text{So, total no. of handshakes} &= (n-1)+(n-2)+(n-3)+\dots+2+1. \\ &= \frac{n(n-1)}{2} \end{aligned}$$

Here, $n=11$.

$$\begin{aligned} \text{So, the total no. of handshakes} &= \frac{(11 \times 10)}{2} \\ &= 55 \end{aligned}$$

Method 2 (Using Combinations)

Total no. of handshakes = no. of ways of selecting 2 people out of n .

$$\begin{aligned} &= {}^n C_2 \\ &= {}^{11} C_2 \\ &= \frac{(11 \times 10)}{1 \times 2} \\ &= 55 \end{aligned}$$

Ans:19)(b)

Explanation:

Statement 1 is incorrect as there is no discussion regarding the vulnerability of low-income countries in the passage. However, the second statement is a direct conclusion that can be derived from the third paragraph.

Ans:20)(d)

Explanation:

Although there is a discussion regarding Electric and Diesel pumps, the author has not discussed anything with respect to their efficiencies. Hence, Option (a) cannot be the answer.

There is no discussion regarding state government's obligations and hence option (b) can be rejected.

The Author is not focussing on the importance of irrigation rather he is trying to portray the environmental issues related to the usage of such pumps. With this, we can rule out option (c) and proceed with option (d).

Ans:21)(a)

Explanation:

The first statement is a correct statement as it is based on the phrase, "But the images coming out of Australia—where bushfires have destroyed more than 12 million acres,

killing at least 26 people and perhaps as many as a billion animals—make it difficult to greet 2020, or the new decade, with optimism about the fight against climate change".

However, The words "Apocalyptic", "Dystopian" and "Armageddon" were used by the fire endured people to describe the level of devastation caused by the bush fires and not their personal struggle against fire. Hence, the second statement is incorrect.

Ans:22)(c)

Explanation:

Here, the answer could be derived from the statement, "In order to better understand the risks due to such disasters, it is necessary to integrate satellite and field-based observations and to work towards risk reduction principles.". Option (d) cannot be the answer because risk reduction principles may or may not be based on the integrated data. It is not evident from the passage.

Ans:23)(a)

Explanation:

Options b, c and d are direct statements taken from the passage, Option (a) is an incorrect conclusion made out by extending the title bestowed upon Kerala for being the largest producer of Pepper in the country.

Ans:24)(d)

Explanation:

The first statement is a correct statement because TRIPS does not prevent anyone from issuing the licences. However, it allows the government to take action against anti-competitive practices. The second statement is an inference that can be derived from the statement, "The Agreement gives governments the right to take action against anti-competitive practices".

Ans:25)(b)

Explanation:

Since the ratio of money given to Megha and Sneha is 2:3, their work done would also be in the same ratio. Thus, their time ratio would be 3:2.

Thus, If Megha takes 12 days, Sneha would take 8 days and the total number of days required would be given by the equation:

$(1/12 + 1/8)*x = 1$ Solving the same, $x = 24/5 = 4.8$ days.

Ans:26)(d)

Explanation:

Filling efficiency of the barrel without leak = $1/10$

Given, It takes 12 hours to empty the barrel with leak, which means the efficiency = $1/12$

Let the emptying efficiency be $1/x$

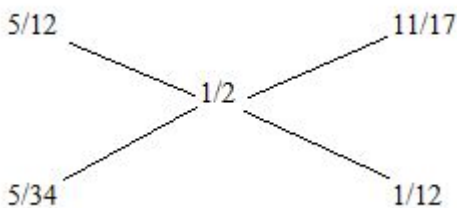
Thus, $1/12 = 1/10 - 1/x$

Solving, $x = 60$ hours.

Ans:27)(a)

Explanation:

Track the proportion of milk or water w.r.t to the entire mixture



$$(1/2) - (5/12) = 1/12$$

$$(11/17) - (1/2) = 5/34$$

By simplifying the ratio $(5/34): (1/12)$

We get the ratio = 60: 34

Which is the same as 30: 17

Ans:28)(c)

Explanation:

Total reduction in daily wages = $280*(250-190) = 16800$

Average decrease in reduction (for all employees) = $\frac{16800}{(280+x)} = 40$

Which means that $x = 140$

Ans:29)(d)

Explanation:

The number of ways is

$$({}^5C_2 \times {}^6C_3) + ({}^5C_3 \times {}^6C_2) + ({}^5C_4 \times {}^6C_1) + ({}^5C_5)$$

$$= 200 + 150 + 30 + 1 = 381$$

$$= 200 + 150 + 30 + 1 = 381$$

Ans:30)(c)

Explanation:

Let the cost = 100

So, selling price = 105 (5% profit)

But he only sells 940 grams for the price of 1 Kg.

So, the actual selling price = $\frac{105}{0.94} = 111.70/\text{Kg}$.

Profit % = 11.70%

Ans:31)(c)

Explanation:

Profit Percentage = $\frac{\text{Profit}}{\text{Cost}} * 100$, Cost = Revenue - Profit

$$2009 = \frac{130}{(420-130)} * 100 = 44.83\%$$

$$2014 = \frac{145}{(485-145)} * 100 = 42.65\%$$

$$2019 = \frac{125}{(395-125)} * 100 = 46.3\%$$

Ans:32)(a)

Explanation:

Male graduates from B = $52000 * \frac{18}{100} * \frac{11}{18} = 5720$

Female graduates from E = $52000 * \frac{22}{100} * \frac{4}{11} = 4160$

As a percentage = $\frac{4160}{5720} * 100 = 72.73\%$

Ans:33)(a)

Explanation:

First we fix E in the first position and fill the remaining positions:

E _ _ _ _ _ → This can be done in $\frac{5!}{2!}$ ways = 60 ways

(2! Because of the two Os)

Next we need to count words with L at first place, followed by E.

L E _ _ _ _ → This can be done in $\frac{4!}{2!} = 12$ ways

Next we count words with L and O at the beginning followed by E.

L O E _ _ _ → This can be done in $3! = 6$ ways

L O O E _ _ → $2! = 2$ ways

Total number of words before Looper = $60 + 12 + 6 + 2 = 80$

Next word will be Looper and hence its position is 81.

Ans:34)(c)

Explanation:

First we need to select/remove all the balls of 2 colors which are more in number.

There is a chance that we select all the balls of 2 colours before selecting a ball of the third colour.

So, if I select 18 green balls and 13 red balls, the 32nd ball will surely be of white colour.

Ans:35)(c)

Explanation:

Option (a) is incorrect.

The premise in the statement is not discussed in the passage, hence it is irrelevant.

Option (b) is incorrect.

Refer to the lines, “Even in small homogeneous societies that have no written language, distinctions are sometimes made between morality, etiquette, law, and religion.” The statement is contradicting these lines, hence it is wrong.

Option (c) is correct.

Refer to the lines, “And in larger and more complex societies these distinctions are often sharply marked. So “morality” cannot be taken to refer to every code of conduct put forward by a society.” Here it highlights the importance of distinction to lay down the scope of morality, which is the same as what’s mentioned in the passage.

Option (d) is incorrect.

The concept of an ideal society is not stated in the passage, hence that statement is incorrect.

Ans:36)(b)

Explanation:

Statement 1 is correct.

Refer to these lines from the passage, “One of the largest human-made permanent magnets in space resides on the International Space Station (ISS), and it’s helping scientists better understand the origins of our universe. The Alpha Magnetic Spectrometer (AMS-02) is an observatory that is collecting data from measurements of cosmic rays, nuclei from hydrogen up to iron, as well as electrons and positrons that pervade all of our universe.”

It is evident from these two lines that data on cosmic rays, nuclei of various elements is vital in the study of the universe.

Statement 2 is incorrect.

Refer the lines from the passage, “AMS-02 was installed on the space station in 2011, with a projected lifespan of three years. Eight years later, it’s still working, having already measured and categorized almost 140 billion cosmic rays.” Though it is stated that the AMS-02 has serviced well over it’s intended lifespan, we cannot arrive at the reason for it from the passage, hence the statement is incorrect.

Ans:37)(b)

Explanation:

Statement 1 is incorrect.

Refer this line from the passage, “Nowhere else in the world is radical economic transformation more urgent than in the least developed countries, which have the challenge of accumulating productive capacities at an unprecedented speed,”

Here it is stated that radical economic transformation leads to accumulating productive capacities, however, the converse for the statement cannot be made from the passage.

Statement 2 is correct.

Refer to this line, “Beyond Business, as Usual, demonstrates how transformational entrepreneurship generates many of the social and economic innovations that underpin sustainable development.”

This line is directly given in the statement.

Statement 3 is correct.

Refer to this line from the passage, “Transformational entrepreneurs create new products and business models; they offer dignified employment; their success leads to broader improvements in the quality of life and even bolsters fiscal sustainability. Dynamic entrepreneurs also make a greater contribution to wealth accumulation and distribution.”

Transformational entrepreneurs means dynamic entrepreneurs from these two lines, thereby the conclusion in the statement can be drawn

Ans:38)(a)

Explanation:

Statement 1 is incorrect.

Throughout the passage, the author is making the point that rapid economic growth has both constructive and destructive effect on the environment, the author is not suggesting to reduce economic growth, rather to adopt policies that benefit the environment, not damage it.

Statement 2 is correct.

Refer to this line from the passage, “This twofold effect highlights both the wide regional variances among different states in Asia and the complex nature of drivers behind environmental performance, as growth could either deteriorate or remediate the environment.”

These lines show that the end result of how economic growth affects the environment in both positive or negative ways, depending on how the policies are implemented.

Ans:39)(a)

Explanation:

The passage as a whole is discussing the importance of learning the Mercury cycle so as to develop solutions to curb its effects. Hence **Option (a) is correct.**

Option (b) and (d) are discussed in the passage, however, they are not the central or main theme of the passage.

Option (c) is not precisely discussed in the passage, hence it is wrong.

Ans:40)(d)

Explanation:

Options (a), (b), (c) are not relevant to the passage as the entirety of the statements are not discussed in the passage and is not a message intended to be passed by the author. Refer the following line, “With gaming poised to be the dominant and most far-reaching media for the emerging generation, its impact and potential can no longer be ignored – it’s a platform with unrivalled potential.”

Here the author sees the potential of such wide exposure thereby wants to give it more attention. Hence, **Option (d) is correct.**

Ans:41)(c)

Explanation:

Statement 1 is correct.

Refer to these lines from the passage, “The availability of cleaner fuels allows countries to adopt cleaner vehicle technologies. A combination of cleaner fuels and more stringent vehicle emission standards will lead to an optimal reduction in harmful air pollutants and improvements in air quality.”

Here it is stated that the adoption of cleaner fuel policies which lead to the availability of cleaner fuel has helped in adopting cleaner vehicle technologies.

Statement 2 is correct,

Refer to these lines, “However, in many developing and transitional countries, this is not the case. Even as the quality of fuel in these countries improves, obsolete and outdated vehicle technologies continue to be imported through the global second-hand vehicles market that is mainly unregulated.”

Despite the availability of cleaner fuels, flooding the market with older vehicles using obsolete technology has not allowed the air quality to improve as intended.

Ans:42)(b)

Explanation:

Option (a) is incorrect. Familiarity in ecological, political, normative and socio-economic context and the science of economics is required to use and interpret economic valuation of ecosystem, not the other way around.

Option (b) is correct.

Refer these lines, “Recognizing, demonstrating and capturing the value of ecosystem services can play an important role in setting policy directions for ecosystem management and conservation “

It is clear that economic valuation of the ecosystem is required to set the right policy for ecosystem management.

Option (c) is incorrect.

Increase the provisions of ecosystem services and contribution to human well-being comes after right after implementation of right policies, which in turn is determined by the economic valuation of ecosystem. Hence it is incorrect.

Option (d) is incorrect.

The economic valuation of ecosystem helps in determining the worthiness and cost of the ecosystem, however, the passage does not discuss any form of taxation, hence it is incorrect.

Ans:43)(a)

Explanation:

Let the speed of the boat be = x km/h

Let the speed of the stream be = y km/h

Speed of the boat against the stream will be = (x - y) km/h

$$= (7500/6750) * (18/5) = 4 \text{ km/h} \text{ ---(1)}$$

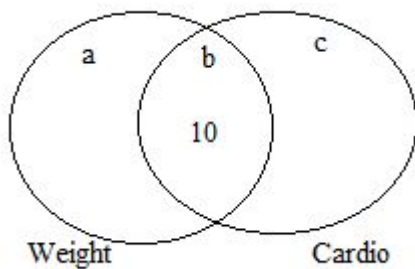
Speed of the boat in the direction of the stream will be = (x + y) km/h

$$= (7500/75 * 60) * (18/5) = 6 \text{ km/h} \text{ ---(2)}$$

$$(1)+(2) \rightarrow 2x = 10 \text{ km/h}$$

Which means the speed of the stream = y = 1 km/hr

Ans:44)(a)



$$a+b = 21 \text{ (given)}$$

$$\text{Thus, } a = 21 - 10 = 11$$

$$C = 50 - 10 - 11 = 29$$

So, we get people who do cardio as, b+c = 39

Only cardio as, c = 29 and only weight training as a = 11

Ans:45)(b)

Explanation:

Method 1:

Let the speed of the boat be = x km/h

Let the speed of the stream be = y km/h

Speed of the boat against the stream will be = (x - y) km/h

Speed of the boat in the direction of the stream will be = (x + y) km/h

$$\frac{24}{(x-y)} + \frac{18}{(x+y)} = 6h \text{ ---(1)}$$

$$\frac{36}{(x-y)} + \frac{36}{(x+y)} = 10h \text{ ---(2)}$$

For simplification,

Let us substitute, $\frac{1}{(x-y)} = m$ and $\frac{1}{(x+y)} = n$.

Such that the equations will get reduced as:

$$24m + 18n = 6 \text{ --- (3)}$$

$$36m + 36n = 10 \text{ --- (4)}$$

Equation (3) can further be simplified as:

$$4m + 3n = 1 \text{ ---- (5)}$$

Equation (4) can further be simplified as :

$$18m + 18n = 5 \text{ ---- (6)}$$

Multiplying Eq. (5) with 18 and Eq. (6) with 4 so as to solve the equations;

$$72m + 54n = 18 \text{ ---- (7)}$$

$$72m + 72n = 20 \text{ ---- (8)}$$

$$(8) - (7) = 18n = 2$$

$$\text{Thus, } n = 2/18 = 1/9$$

$$m = (1 - 3n)/4 = (1 - 3*(1/9))/4 = \frac{1}{6}$$

$$\text{Thus, } m = 1/(x-y) = \frac{1}{6} \Rightarrow x-y = 6$$

$$\text{Similarly, } m = 1/(x+y) = 1/9 \Rightarrow x+y = 9$$

$$\text{Adding the two equations, } 2x = 6 + 9 = 15, x = 7.5 \text{ km/hr}$$

$$y = 1.5 \text{ km/hr}$$

Method 2:

$$\begin{aligned} \text{Downstream speed} &= x + y = \\ ((24*36) - (36*18)) / ((24*10) - (36*6)) \\ &= 216/24 = 9 \text{ km/hr} \text{ ----> (1)} \end{aligned}$$

$$\begin{aligned} \text{Upstream speed} &= x - y = \\ ((18*36) - (24*36)) / ((18*10) - (36*6)) \\ &= 216/36 = 6 \text{ km/hr} \text{ ----> (2)} \end{aligned}$$

Solving, y = 1.5 km/hr

Ans:46)(a)

Explanation:

$$|6x - 3| = 21 \rightarrow 6x - 3 = 21 \text{ or } 6x - 3 = -21$$

$$6x = 24 \text{ or } 6x = -18$$

So, x is either 4 or -3

Ans:47)(d)

Explanation:

$$\begin{aligned} (1-0.72) * (15000) + (1-0.6) * (18200) + \\ (1-0.84) * (15000) + (1-0.92) * (18000) = \\ 15320 \end{aligned}$$

Ans:48)(a)

Explanation:

$$\begin{aligned} \text{Reqd. answer is} &= \frac{5000+10000+25000+20000+25000+15000}{6} = \\ &16666 \frac{1}{6} \end{aligned}$$

Ans:49)(c)

Explanation:

Let the two digit number = $ab \rightarrow 10a+b$

By reversing, $ba \rightarrow 10b+a$

Now $ab: ba = 13: 31$

So, $31(10a+b) = 13(10b+a) \rightarrow a: b = 1: 3$

Possible numbers are 13, 26, and 39.

Ans:50)(b)

Explanation:

Let us assume the dice in fig. (ii) to be rotated so that the face with 5 dots appears at the same position as in fig. (i). So, the dice was rotated upwards, which brought the face with 1 from front to top. On either side of the face containing 1, we have faces with 2 and 4. These two faces are opposite to each other, therefore, two dots are contained on the face opposite to that containing four dots.

Ans:51)(a)

Explanation:

From figure X, we can determine that 1 and 4 does not appear opposite 5. From figure Z, we can find out that 2 and 6 do not appear opposite to 5. So, the only number that can come opposite to 5 is 3, which is the bottom face in figure X.

Ans:52)(d)

Explanation:

Let their present ages be x and $52-x$ (sum of ages 52).

The man who is x years old now was $52-x$ years old n years ago:

$$\rightarrow x - n = 52 - x \rightarrow n = 2x - 52$$

$$\text{So, the neighbour was } ((52-x) - (2x-52)) = 104 - 3x$$

$$X = 4*(104 - 3x) \Rightarrow 13x = 416 \rightarrow x = 32.$$

Ans:53)(b)

Explanation:

Refer the statement, "The easy availability of these devices, alluring advertisements, various e-liquid flavours, and the belief that they're safer than cigarettes have helped make them appealing to this age group", It clearly negates the given statement that e-cigarettes are safer than normal cigarettes. Hence, **Statement 1 is incorrect.**

However, the second statement is correct one as per the statement, "using e-cigarettes for dripping, a practice in which people produce and inhale vapours by placing e-liquid drops directly onto heated atomizer coils"

Ans:54)(d)

Explanation:

Options (b) and (c) can be eliminated right away as migration is just a part of his childhood and Istanbul's history is not being discussed in the passage. Although Options (a) and (d) are statements that seem valid, Author's emotional attachment with his mother takes a side role in the big picture where his attachment with Pamuk Apartments is being discussed.

Ans:55)(d)

Explanation:

Statement 1 is incorrect.

Refer the lines, "Animal Husbandry, Dairying and Fisheries activities, along with agriculture, continue to be an integral part of human life since the process of civilization started. These activities have contributed not only to the food basket and draught animal power but also by maintaining ecological balance."

Statement 1 is directly contradicting the lines from the passage and it is incorrect.

Statement 2 is incorrect.

Referring to the lines from the passage, "Traditional, cultural and religious beliefs have also contributed to the continuance of these activities."

This statement too contradicts the passage, hence it is incorrect.

Ans:56)(b)

Explanation:

Statement 1 is incorrect.

It is not relevant to the passage, hence can be discarded as education is not mentioned in the passage.

Statement 2 is correct.

The last half of the passage deals with how to tackle the issue of improving sanitation, by outlining the process briefly, which is

summarised in the statement, hence it is correct.

Ans:57)(b)

Explanation:

S+2 → U

E+3 → H

C+4 → G

O+5 → T

N+6 → T

D+7 → K

Following the same pattern, we get the code OLRZZL

Ans:58)(a)

Explanation:

The first, third, fifth and seventh letters of the word are each moved two steps forward, the second, and sixth letters are each moved two steps backwards, while only the fourth letter is moved one step backwards.

Ans:59)(b)

Explanation:

The thing to be careful about here is that the numbers bear a certain relationship among themselves along the rows; not columns. So, as much as 21 seems like the right option, it is not.

The sum of the three numbers in a row will be equal to 80.

Sum of numbers in 1st Row, $44+21+15 = 80$

Sum of numbers in 3rd Row, $40+23+17 = 80$

So, the sum of numbers in the 2nd row should also be 80.

$X = 80 - (38+23) = 19$

Ans:60)(c)

Explanation:

Method 1 :

$6+8 = 14$, $14+10 = 24$, $24+12 = 36$, $36+14 = 50$

Method 2:

The series is → $(5*1)+12$, $(5*2)+22$, $(5*3)+32$, $(5*4)+42$

So, the missing term will be $(5*4)+42=36$

Ans:61)(d)

Explanation:

Method 1:

After turning 90° , She is looking in the East direction, then after turning 135° in the same direction, she would be facing the southwest direction. At last after turning 270° she would be facing the northwest direction.

Method 2:

Taking clockwise direction as positive and anti-clockwise direction as negative,
 $90^\circ + 135^\circ - 270^\circ = -45^\circ \Rightarrow 45^\circ$ anticlockwise which is Northwest.

Ans:62)(c)

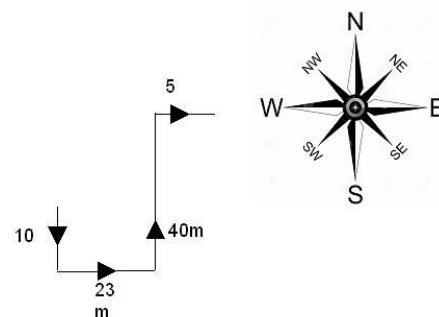
Explanation:

If the minute hand is pointing towards the west, there will be a difference of 45° in the minute hand and the hour hand at 4.30. And that difference would be in the anticlockwise direction. Hence, Southwest direction.

Ans:63)(b)

Explanation:

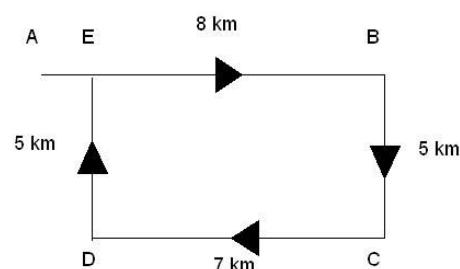
Refer to the diagram.



Ans:64)(a)

Explanation:

Refer to the diagram.



Ans:65)(c)

Explanation:

$$(f + m + s)/3 = 35$$

$$\Rightarrow f + m + s = 105 \text{ --- (1)}$$

$$m + 15 = f + s$$

Substituting $f + s$ as $m + 15$ in (1), we get

$$2m + 15 = 105$$

$$2m = 90 \Rightarrow m = 45 \text{ years.}$$

Ans:66)(b)

Explanation:

Let the three consecutive odd integers be a , $a + 2$ and $a + 4$ respectively.

$$a + 4 + a + 2 = a + 13 \Rightarrow a = 7$$

Hence three consecutive odd integers are 7, 9 and 11.

Ans:67)(d)

Explanation:

Option (a) is incorrect.

As mentioned in the first sentence of the passage an environment free from violence and discrimination is not a result of empowering women. First statement just means empowered women live in a society free from violence and discrimination. Also, there is no mention of any prioritization in the passage. Hence it is incorrect.

Option (b) is incorrect.

As mentioned in the passage, well nourishment of children and an environment with full opportunities for growth will be ensured by empowering women. Hence there is no reason to prioritise these, as these will happen once women empowerment takes place.

Option (c) is incorrect

The first sentence does mention that empowered women live in an environment free from violence and oppression, but it is not mentioned as a necessary condition. So it is incorrect.

Ans:68)(d)

Explanation:

Statement 1 is incorrect.

Refer to this line from the passage, "Fish products have traditionally been among the most important commodities traded in this

region, and fish consumption has always been an integral part of people's diet."

Here it is explained that both marine trade and fish consumption is a part of the region, but it is not stated that trade is the reason for consumption or vice versa, hence the statement is incorrect.

Statement 2 is incorrect.

The passage does discuss that an increase in demand has put many species in a vulnerable state, however tourism is not attributed as a reason in the passage, hence it is incorrect.

Ans:69)(c)

Explanation:

Statement 1 is correct.

Refer the following line, "This work is becoming even more critical as the world seeks to avoid the devastating effects of future financial crises while utilizing the opportunities of modern financial services to meet the rising aspirations of the poor. This is possible only through efficient financial systems with stakeholders whose incentives are aligned with those of society as a whole."

The statement is explained in those lines. Hence it is correct.

Statement 2 is incorrect

Refer to these lines, "This work is becoming even more critical as the world seeks to avoid the devastating effects of future financial crises while utilizing the opportunities of modern financial services to meet the rising aspirations of the poor."

It is mentioned that the world is cautious about avoiding a financial crisis like before, but there is nothing mentioned about developing countries staying away from availing financial help. Hence the statement is incorrect.

Statement 3 is correct.

Refer to these lines, "Crowding-in the private sector is crucial not only as an engine of growth in developing countries, but also as a foundation for the kind of market discipline that can prevent excessive risk-taking and put capital in the hands of the entrepreneurs who can invest in the future. The right regulatory and supervisory

environment—accompanied by effective financial sector policies—is key to creating a financial system that can attract private capital and align private incentives with the public good.”

From here it is evident that a right policy and proper regulatory body can help the developing countries benefit from the private investments.

Ans:70)(a)

Explanation:

Method 1:

We'll solve this by making use of the options. Option (a) suits the given condition best as if we take the distance as 12 km she would have taken 1 hour to go by car and 4 hours to come back walking - a total of 5 hours as given in the problem.

Method 2:

$$x/12 + x/3 = 5$$

Solving, $x = 12\text{km}$

Ans:71)(c)

Explanation:

In 4 hours, the car will travel 180 km. The number of poles would be $= 180000/50 = 3600$. Considering the extra pole in the beginning, total number of poles = 3601

Ans:72)(d)

Explanation:

Rini being twice as good as Vinay, If the efficiency of Rini is $1/R$ then the efficiency of Vinay = $1/2R$

Together they can finish the work in 14 days. So the amount of work done in 1 day = $(1/R) + (1/2R) = 1/14$

Solving, $R = 21$ days.

Therefore time taken by Vinay to complete the work alone = $2 \times 21 = 42$ days.

Ans:73)(c)

Explanation:

Let 'n' be the number of days for which they worked together.

$$\text{Then, } n \cdot \left(\frac{1}{45} + \frac{1}{40} \right) + \frac{23}{40} = 1$$

Solving, $n = 9$ days.

Ans:74)(b)

Explanation:

Method 1:

There are 900 three-digit positive integers (starting at 100 and up to 999, i.e. $999 - 99$). $900 / 6 = 150$, hence, there will be 150 positive three-digit numbers (integers) divisible by 6.

Ans:75)(d)

Explanation:

Let us assume the number as 'n'.

According to the question,

If 24 is subtracted, it becomes $4/7$ of the number.

$$n - 24 = n \times 4/7$$

$$\Rightarrow n - 4n/7 = 24$$

$$\Rightarrow (7n - 4n)/7 = 24$$

$$\Rightarrow 3n/7 = 24$$

$$\Rightarrow 3n = 24 \times 7$$

$$\Rightarrow n = 24 \times 7/3$$

$$\Rightarrow n = 8 \times 7$$

$$\Rightarrow n = 56$$

Sum of the digits of the number = $5 + 6 = 11$

Ans:76)(b)

Explanation:

Let us assume the salary of Amal be R

Then Tips of week = $R \times 5/4$

According to the question,

his income during one week = Salary + Tips

$$\Rightarrow \text{Total Income during one week} = R + (5R/4)$$

$$\Rightarrow \text{Total Income during one week} = (4R + 5R)/4 = 9R/4$$

Required Fraction = Tips in a week/Total Income in a week

$$\Rightarrow \text{Required Fraction} = (5R/4) / (9R/4)$$

$$\Rightarrow \text{Required Fraction} = 5/9$$

Ans:77)(c)

Explanation:

Explanation:

Let the present age of Xavier be 'x' and that of Yali be 'y'.

So, $y = x - 10$ eqn (1).

10 years back Yali was $(y - 10)$ years old. 10 years back Xavier was $(x - 10)$ years old.

As per the question, 10 years back Yali was two thirds as old as Xavier was.

i.e., $(y - 10) = (2/3)(x - 10)$ eqn (2).

Cross multiplying, we get $3(y - 10) = 2(x - 10)$

or $3y - 30 = 2x - 20$ eqn (2)

From eqn (1) we can substitute y as $(x - 10)$ in eqn (2)

So, $3(x - 10) - 30 = 2x - 20$

or $3x - 30 - 30 = 2x - 20$

or $x = 40$.

Thus, The present age of Xavier is 40 years.

Ans:78)(a)

Explanation:

Method 1:

Total number of possible pairs = $13 \times {}^4C_2 = 78$

In Scenario 1, There are 73 pairs that Bilal might get. $(78 - (6-1) = 73)$

In Scenario 2, There are 72 pairs that Bilal might get. $(78 - (6-3) - (6-3) = 72)$

Thus, It is more likely to get a pair for Bilal in the first scenario.

Method 2:

We want to count how many pairs are remaining in the deck after Jackie's cards are given in Scenario 1 and Scenario 2. We can ignore all the cards other than the queens and 5s; since there are four of every other type, they will provide an identical number of pairs in both scenarios.

Scenario 1 consists of two queens and four 5s. We can make 1 pair from the former and 6 pairs from the latter. Scenario 2 consists of three queens and three 5s. We can make 3 pairs from the former and 3 pairs from the latter.

Since Scenario 1 allows $1 + 6 = 7$ pairs and Scenario 2 allows $3 + 3 = 6$ pairs. Scenario 1 is more likely to deal out a pair.

Ans:79)(d)

Explanation:

According to the statement, 70% of the total runs were made by the batsmen. But that does not mean 70% of the team are batsmen. So, I do not follow. Nothing about the batsmen being able to bowl is mentioned in the statement. So, II also does not follow.

Ans:80)(c)

Explanation:

The statement asserts that a good guitarist always has an electric guitar and only good guitarists are invited to the conference. This implies that all those invited in to the conference have an electric guitar and those who do not have one are not good guitarists and are not invited. So, both I and II follow.