**Data Sufficiency Problems**

**30/08/13**

1. **On which date of the month was Sushmita born in april 2009?**
2. **Sushmita was born on an even date of the month.**
3. **Sushmita’s birth date was a prime number.**

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**Answer and explanation**

**Answer:** Option **E**

**Explanation:**

From I and II, we conclude that Sushmita was born in April 2009 on a date which is an even prime number. Since the only even prime number is 2, so Sushmita was born on 2nd April, 2009.

1. X is the brother of Y. How is Y related to X?
2. Y is the sister of Z.
3. P is the husband of Y.

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**Answer and explanation**

**Answer:** Option **C**

**Explanation:**

X is Y's brother means Y is either brother or sister of X. Now, each one of I and II individually indicates that Y is a female, which means that Y is X's sister.

1. How many shops are there in the town?
2. There is one shop per 50 residents.
3. There are 30 localities each containing as many shops as the number of localities.

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**Answer and explanation**

**Answer:** Option **B**

**Explanation:**

From I, total number of shops in town cannot be calculated because the total number of residents in the town are not known.

From II, total number of shops in town

= (Number of localities in town) x (Number of shops in each locality)

= 30x30 = 900.

1. On what day of the week was Shiban born?
2. Shiban celebrated his birthday two days after his friend Amit celebrated his birthday.
3. Shiban’s sister was born on the fifth day of the week and 2 days after Shiban was born.

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**Answer and explanation**

**Answer:** Option **B**

**Explanation:**

I does not mention the day of the week on the birthday of either Shiban or Amit.

According to II, Shiban's sister was born on Friday and Shiban was born two days before Friday i.e. on Wednesday.

1. How many pages of a book did Rajiv read on Wednesday?
2. Rajiv finished two-thirds of the book which totally contains 600 pages on Tuesday.
3. Rajiv read the last 20 pages on Thursday.

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**Answer and explanation**

**Answer:** Option **E**

**Explanation:**

From I and II, we find that Rajiv read (600 x 2/3) i.e. 400 pages before Tuesday and the last 20 pages on Thursday.

This means that he read [600 - (400 + 20)] i.e. 180 pages on Wednesday.

1. How is Aishwarya related to the man in the photograph?
2. The man is the only son of Aishwarya’s grandfather.
3. The man has no brothers and sisters and hisfather is Aishwarya’s grandfather.

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**Answer and explanation**

**Answer:** Option **B**

**Explanation:**

From I, we conclude that the man is the only son of Aishwarya’s grandfather but it is not known whether Aishwarya’s grandfather had a daughter. Aishwarya could have been her daughter.

From II, we conclude that the man's father is Aishwarya’s grandfather. Since the man has no brothers or sisters, so he is Aishwarya's father or Aishwarya’s is the man's daughter.

1. On which date of January was Rajat born?
2. Rajat’s brother remembers that he was born after 10th but before 15th of the month.
3. Rajat’s mother says he was born before 12th and after 6th.

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**Answer and explanation**

**Answer:** Option **E**

**Explanation:**

From I, we conclude that Rajat was born on any one of the dates among 11th, 12th, 13th and 14th.

From II, we conclude that Rajat was born on any one of the dates among 7th, 8th, 9th, 10th and 11th.

Thus, from both I and II, we conclude that Rajat was born on 11th January.

1. What is Rahul’s age?
2. Rahul, Rajat and Shyam all are of equal ages.
3. Total age of Rajat, Shyam and Anil is 24 years. Anil’s age is as much as Rajat and Shyam’s put together.

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**Answer and explanation**

**Answer:** Option **E**

**Explanation:**

As given, we have Ra=Raj=Sh. Raj+Sh+An=24 years. A=Raj+Sh.

Thus Raj=Sh=Ra= 6 years old.

Thus Rahul’s age is 6.

1. How much money do Karan and Kiran have?
2. Karan has 20 rupees less than Soham.
3. Kiran has 30 rupees more than Soham.

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**Answer and explanation**

**Answer:** Option **D**

**Explanation:**

Neither of the statements is sufficient because we do not know how much money Soham has.

1. How far is Ramnagar from Srinagar?
2. Ramnagar is 20 Kms from Girinagar.
3. Srinagar is 30 Kms from Girinagar.

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**Answer and explanation**

**Answer:** Option **D**

**Explanation:**

Clearly, the distance of each village from Girinagar is given in I and II. But nothing about their relative positions is mentioned. So, the distance between the two villages cannot be calculated.

1. Anusha and Poornima receive apples in the ratio 3:4 respectively. How many apples does Anusha receive?
2. Anusha gets 75% of the amount of apples that Poornima gets.
3. Poornima gets 20 apples.

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**Answer and explanation**

**Answer:** Option **B**

**Explanation:**

Statement I is merely an interpretation of the information contained in the question.

From statement II we know that Poornima gets 20 apples. So Anusha should get 15 apples.

1. What is Nitin’s rank from the top in a class of 50 students?
2. There are 5 students between Nitin and Naren.
3. Naren is ranked 15th from the top.

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**Answer and explanation**

**Answer:** Option **D**

**Explanation:**

Since there are 5 students between Nitin and Naren, Nitin can either be ranked 9th or 21st.

1. Which direction is the bird flying in?
2. If the bird turns right and turns right again, then it’ll be facing north.
3. If the bird flies a little distance, turns right and flies a little more, then its beak will be pointed towards the right of a river that is flowing south.

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**Answer and explanation**

**Answer:** Option **C**

**Explanation:**

From statement I we conclude that the bird turns in the opposite direction to its initial path.

From statement II we conclude that the bird was initially flying in the direction of the river.

In both cases, the answer is south.

1. How many bats were sold in the sports shop this year?
2. Last year, 1335 bats were sold.
3. This year’s sale was 1.4 times the last year’s sale.

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**Answer and explanation**

**Answer:** Option **E**

**Explanation:**

From both I and II, we find that the number of bats sold this year = (1335x1.4) = 1869.

1. How many fans watched the football match yesterday?
2. Each pass admits utmost 3 people.
3. Totally, 1500 passes were sold.

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**Answer and explanation**

**Answer:** Option **D**

**Explanation:**

From I and II, we find that maximum (1500 x 3) i.e. 4500 visitors saw the football match.

But the exact number cannot be determined.