

## LeadSquared Online Test

### ReportsDev – Test

#### SECTION 1:

- 1) `SELECT DEPARTMENT, COUNT(*) FROM Employee GROUP BY DEPARTMENT;`
- 2)
- 3) `SELECT Employee.First_name,Employee.last_name, sum(incentives.incentive_amount)  
AS TOTAL_INCENTIVE from Employee inner join Incentives ON  
Employee.Employee_id=Incentives.Employee_ref_id group by  
Incentives.employee_ref_id;`
- 4) `SELECT month(incentive_date),max(MAXIMUM) from (select  
incentive_date,sum(incentive_amount) AS MAXIMUM from incentives group by  
month(incentive_date));`

#### SECTION 2:

##### 1) 1<sup>ST</sup> QUESTION SOLUTION:

1. Start the 7 minute sand timer and the 4 minute sand timer.

2. Once the 4 minute sand timer ends turn it upside down instantly.

Time Elapsed: 4 minutes. *At this moment, 3 minutes of sand is left in the 7 minute sand timer.*

3. Once the 7 minute sand timer ends turn it upside down instantly.

Time Elapsed: 7 minutes. *At this moment, 1 minutes of sand is left in the 4 minute sand timer.*

4. After the 4 minute sand timer ends, only 1 minute is elapsed in 7 minute sand timer, therefore for another minute turn the 7 minute sand timer upside down.

Time Elapsed: 8 minutes.

5. When the 7 minute sand timer ends, total time elapsed is 9 minutes.

So effectively  $8 + 1 = 9$ .

2) 2<sup>ND</sup> QUESTION ANSWER:

$$P(\text{Both girls} \mid \text{At least one girl}) = P(\text{both girls}) / P(\text{At least one girl})$$

$$P(\text{Both girls}) = .5 * .5 = .25$$

$$P(\text{At least one girl}) = 1 - P(\text{No girls})$$

$$P(\text{No girls}) = P(\text{Both boys}) = .5 * .5 = .25$$

$$P(\text{AT least one girl}) = 1 - .25 = .75$$

$$\text{Thus, } P(\text{Both Girls} \mid \text{At least one girl}) = .25 / .75 = 1/3$$

3) 3<sup>RD</sup> QUESTION SOLUTION:

The author in the argument concludes that as the Ron's cafe increased its business by 10 percent over the last year by advertising in the local radio station, so other businesses should follow suit and advertise their businesses on the local radio to make their business more profitable. However, the argument is flawed because it fails to supply sufficient support in favour of the argument.

First, we are told that for Ron's Cafe increased its business by 10 percent over the last year by advertising in the local radio, but it has not been mentioned that whether the increase in the business was offset by the amount of money spent on advertisement in the radio channel. If the previous scenario holds true, then companies actually might not be increasing their profits.

Second, Even if we consider that the business for cumquat coffee increased after it advertised in the local radio, we cannot be sure that this will happen for other businesses. It could well be the case that many people who listen to the radio might be coffee consumers, but might not be interested in other products. Therefore, the generalization that the author makes based on a single case might not hold true for other scenarios or businesses.

Finally, there could be other alternate reasons that could have contributed to the success of the cafe business such as opening of a new outlet or better management of the cafe resources or introduction of a new product in the cafe outlet that sold well. Any of these reasons could account for the increase in the business. Therefore, advertising in the local radio might not be the only contributor for the increase in the cafe business.