IBM 笔试主要考察学生的逻辑思维水平和推理能力，笔试为全英文，对英语的阅读能力要求比较高。

所以在准备笔试之前，你要熟悉下面的词汇：

reversed	翻转的，颠倒的，在第一部分出现不止两次
odd/even	奇数/偶数
row/column	行／列的英文给出来了，不用记了。
diagonal	对角线，出现好几次，高频词汇
clockwise	顺时针方向
counterclockwise	逆时针方向
exchange	交换，交易，兑换
proportion	比例
twice as much as	一个是另一个两倍
liter	公升，这个没人不知道把，这个词出现次数很多，不认识也没关系
mixed/misture	混合／混合物，此类题目全部用一元方程就可以了 width
cube	立方
perimeter	周长
radius	半径
diameter	直径
volume	体积
perimeter	周长
remainder	余数
periphery	外围
fraction	分数
rectangle	长方形, 矩形
square	正方形
subtract	减法
imension	维，尺寸，度

根据往年的 IBM 实习笔试题目总结，笔试题型主要包括矩阵题，序列题，数学推理题（应用题）。

矩阵题：

下面资料是根据历史资料整理，不代表今年的情况。

共 15 道题，答题时间：13 分钟。答错不扣分。

1.一共有三个 5*5 的矩阵，每个矩阵 5 小题，在印象中，大概有这样一些：把所有的 W 替换成 2，所有的 Y 替换成 6，所有的 X 替换成 4，哪一行和哪一列的和等于 18？

把第四列反转，把第 2 行和第二列替换，第三列第四个下面的数字是什么？

把出现了数字 2 次数最多的那一行的出现的唯一一个字母从矩阵中删掉,它出现在矩阵其他地方的次数减去 3 出现的次数和 4 出现的次数减一是多少？

把每一个出现在数字 2 和 3 左边的字母全部与他们右边的数字交换,出现在数字最多的那一列的两个字母是？

2.开始给出一个 4×5 的矩阵，然后矩阵中的元素是类似于 a,b,c,d 这样的字母，题目有某一

行中出现次数最多的元素是什么，这样的比较简单，还有从某个元素开始按逆时针或是顺时针方向旋转得到的元素是什么之类的，这样的就比较麻烦。

题目介绍：
1.
E D C B A
C A D E B
A D B C E
B E D A C
D C A E B
Start at the fourth letter of Column 5 and follow the letters around the outside of the pattern in a clockwise direction. What is the second letter between the second E and the second B you come to?

答案：C
解析：根据题意，从第 5 列第 4 个字母开始，在矩阵元素外沿顺时针方向走，在第 2 个 E 字母和第 2 个 B 字母之间的第二个字母应该为 C，如图所示：

2:
A B 2 C 3
1 1 B 3 D
A 1 B C 4
5 A 5 2 B
E 5 D 2 C
In the row that has more letters than numbers, in which the numbers are separated by only one letter, and in which the numbers sum to less than the sum of the numbers in the second column, which letter comes just before the second number, counting from right to left?

答案：C

解析：根据题意：（1）字母比数字多的行有第 1 行、第 3 行、第 5 行；（2）数字只被 1 个字母隔开的行只有第 1 行；（3）在第 1 行中，从右往左数，在第 2 个数字（即 2）之前的字母应该为 C。
这道题的关键是找出题干中要求的那一行，其中最后一个条件：这一行的数字之和要小于第二列的数字之和（即 1+1+5=7）可作为排除第 5 行的依据。

3:
E D C B A
C A D E B
A D B C E
B E D A C
D C A E B
If Row 4 were reversed, what letter would be above E in Row 5?

答案：E

解析：如果将第 4 行的字母倒转，则第 4 行变为：C A D E B，则在第 5 行字母 E 的上面的字母就是变化后的低行，从右往左数的第 2 个字母 E。

tips：

搞清楚题目考察的位置，row,column,diagonal,reverse 这些词要搞懂，然后用什么替代什么也搞搞清楚，可以用笔简单标一下，铅笔和黑色水笔区分开两次标记，然后再用其他字迹的笔标另外一次，关键是让自己看明白。最高境界大概是不标直接看！

这分打错不扣分，即使时间不够答题卡上一定要涂满

主要是时间不太够，这个部分拼得就是速度

序列题

4 分钟 20 道题，答错倒扣 1/4 分

基本上都是两个一组，三个一组，全是一个规律：连续几个数字，跳一个，再连续几个数字。

题目介绍：

It consists of number series. In some institutes alphabetical series is given instead of number series.

1. 30,28,25,20,34,28,?

a:21

2. 4,8,16,32,64,128,?

a:256

3. 8,16,24,32,40,48,?

a:56

4. 13,11,14,12,15,13,?

a:16

5. 6,18,36,108,216,648,?

a:1296

6 4,4,8,8,16,16,?

a:32

7. 2,6,18,54,162,486,?

a:1458

8. 4,20,35,49,62,74,?

a:85

9. 10,18,15,23,20,28,?

a:25

10. 4,10,8,14,12,18,?

a:16

11.10,15,12,17,14,10,?

a:16

tips：这部分时间是最紧张的，看了题目直接在答题卡上划个线标出来，然后 hr 收试题的时候再慢慢去涂到你觉得最漂亮为止，千万别在试题卷上标记答案而没有在答题卡上标，这样既浪费时间而且可能等下试卷被收了还没把答案涂到答题卡上。

数学推理题
共 12 道题，答题时间：15 分钟。答错倒扣 1/4 分

繁琐的数学，像初中的分数应用题，计算量比较大，全是小数点和分数。
中文：
1.有 3 台复印机（copier），平均每台每周工作 42 小时，每台每周最少工作 35 小时，问一台复印机每周最多会工作多少小时？
42*3 - 35*2 ＝56

2.在一个长 11 meters，宽 6 meters 的房间里，铺上 10 centimeters 厚的水泥，问需要多少水泥？
11*6*0.1＝6.6 cubic meters

3.某公司有两座办公楼，一天，第一座楼 20％的复印机和第二座楼 40％的复印机需要进行维护，如果第一座楼拥有公司 60％的复印机，问这天在维护的复印机是多少？
20% * 60% + 40% * (1 - 60%) = 28%

4.要在一个接待室(reception room)里铺瓷砖，接待室的长 18 meters，宽 12 meters，同时要修一条从大厅(hall)到楼梯(stair way)的通道（不铺瓷砖）占地 50 square meters，允许铺设时有 35％的浪费(wastage)，1 平方米瓷砖的价格是 10 美元，问大约(approximately)要花多少钱？
(18 * 12 - 50) * 135% * 10 = 2,200

5.某公司要做一个车辆更新，有 2 种车型，一种是 X(忘了，用 X 代替),一种是 van，新 X 每 liter 油走 20 公里，新 van 每 liter 油走 15 公里，旧 X 每 liter 油走 15 公里，旧 van 每 liter 油走 12 公里。现在要开 15000 公里，其中有 60％由 van 来承担，问更新后将节省多少油？
(15000 * 60% / 12 + 15000 * 40% / 15) - (15000 * 60% / 15 + 15000 * 40% / 20) = 250

6.有 2 个行政打字员(administrative typist)，A 的速度是 B 的 1 1/4 times，现在要打 72 页文件，问快的那个人打了多少页？
72* 5/9 = 40

7.有一个呼叫中心，星期二的 calls 比星期一的 1/2 还多 1/3，星期一和星期二的 calls 的和是 120，问星期二的 calls 是多少？
48

8.有一个软件公司，1/2 的人是系统分析员，2/5 的人是软件工程师，有 1/4 的人两者都是，问有多少人两者都不是？
1 - 1/2 - 2/5 + 1/4＝ 0.35

9.有一个 crate 要做等比例(proportionally)的缩放，为了能够便于运输(shipment)，crate 的尺度(dimension)是 72,96,48，如果缩放到三个尺度的和是 200，问最长的那个尺度要缩多少？
96 * (1 - 200 / 216) = 64 / 9 = 7.1

10. 有一个矩形，长是宽的 1 1/3 times，如果把每边增加 1，面积将增加 85，问长是多少？
48

11.有一个 printer，一小时能打 12,000 页，早上 8:30 开始打印，中途被打断 2 次，每次 5 分钟，13:15 打完，问总共打了多少页？
55,000

英文：
1.A clerk multiplied a number by ten when it should have been divided by
ten.The ans he got was 100.what should the ans have been?
a:1
2.If Rs20/- is available to pay for typing a research report & typist A produces 42 pages and typist B produces 28 pages.How much should typist A receive?
a:Rs12/-
3.The average salary of 3 workers is 95 Rs. per week. If one earns
Rs.115 and second earns Rs.65 how much is the salary of the 3rd worker.
Ans.105.
4.A 16 stored building has 12000 sq.feet on each floor. Company A rents 7 floors and company B rents 4 floors. What is the number of sq.feet of unrented floor space.
Ans.60000
5. During a given week A programer spends 1/4 of his time preparing flow
chart, 3/8 of his time coding and the rest of the time in debugging the
programs. If he works 48 hours during the week , how many hours did he
spend debugging the program.
Ans. 18.
6. A company installed 36 machines at the beginning of the year. In March
they installed 9 additional machines and then disconnected 18 in August.
How many were still installed at the end of the year.
Ans. 27
7. A man owns 2/3 of the market research beauro business and sells 3/4 of
his shares for Rs. 75000. What is the value of Business.
Ans.150000
8. If 12 file cabinets require 18 feet of wall space, how many feet of wall space will 30 cabinets require?
Ans.45
9.A computer printer produced 176,400 lines in a given day. If the
printer was in operation for seven hours during the day, how many lines did it print per minute?
Ans.420
10. From its total income, A sales company spent Rs.20,000 for advertising, half of the remainder on commissions and had Rs.6000 left.
What was its total income?
Ans.32000
11. On Monday a banker processed a batch of cheques, on Tuesday she

processed three times as many, and on Wednesday she processed 4000 cheques. In the three days, she processed 16000 cheques. How many did she process on Tuesday?

Ans.9000

12. The cost of four dozen proof machine ribbons and five dozen accouting machine ribbons was Rs.160/-. If one dozen accounting machine ribbons cost Rs.20/-, what is the cost of a dozen proof machine ribbons?

Ans.Rs.15

13. If a clerk can process 80 cheques in half an hour, how many cheques can she process in a seven and one half hour day?

Ans.1200

14. In a library, there are two racks with 40 books per rack. On a given day, 30 books were issued. What fraction remained in the racks?

Ans.5/8

15. The average length of three tapes is 6800 feet. None of the tapes is less than 6400 feet. What is the greatest possible length of one of the other tapes?

Ans.7600

16. A company rented a machine for Rs.700/- a month. Five years later the treasurer calculated that if the company had purchased the machine and paid Rs.100/- monthly maintenance charge, the company would have saved Rs.2000/-. What was the purchase price of the machine?

Ans.Rs.34000

17. Two computers each produced 48000 public utility bills in a day. One computer printed bills at the rate of 9600 an hour and the other at the rate of 7800 an hour. When the first computer finished its run, how many bills did the other computer still have to print?

Ans.9000

18. If a salesman's average is a new order every other week, he will break the office record of the year. However, after 28 weeks, he is six orders behind schedule. In what proportion of the remaining weeks does he have to obtain a new order to break the record?

Ans.3/4

19. On a given day, a bank had 16000 cheques returned by customers. Inspection of the first 800 cheques indicated that 100 of those 800 had errors and were therefore the available immediately for data processing. On this basis, hwo many cheques would be available immediately for data processing on that day?

Ans.14000

20. A company figured it needed 37.8 sq.feet of carpot for its reception room. To allow for waste, it decided to order 20% more material than needed. Fractional parts of sq.feet cannot be ordered. At Rs.9/- a sq.feet, how much would the carpet cost?

Ans.

a. Rs.324 b) Rs.405 c) Rs.410 d) Rs.414 e) Rs.685

21. A tape manufacturer reduces the price of his heavy duty tape from Rs.30/- to Rs.28/- a reel and the price of a regular tape from Rs.24/- to Rs.23/- a reel. A computing centre normally spends Rs.1440/- a month for tapes and 3/4 of this is for heavy duty tapes. How much will they save a month under the new prices?

Ans.Rs.87   132

22. In a team of 12 persons, 1/3 are women and 2/3 are men. To obtain a team with 20% women how many men should be hired?

Ans.8

23. The dimensions of a certain machine are 48″ X 30″ X 52″. If the size of the machine is increased proportionately until the sum of its dimensions equals 156″, what will be the increase in the shortest side?

Ans. 6″

24. In a certain company, 20% of the men and 40% of the women attended the annual company picnic. If 35% of all the employees are man, what percent of all the employees went to the picnic?

Ans.33%   21%

25. It cost a college Rs.0.70 a copy to produce a Programme for the homecoming football game. If Rs.15,000/- was received for advertisements in the programme, how many copies at Rs.0.50 a copy must be sold to make a profit of Rs.8000/- ?

Ans. 35000

tips：
直接在试卷上打草稿，不要在一道题目上纠缠太久，算了没答案就猜一个，有很多是不用算可以直接看答案猜的。大家考了这么多年试，选择题的什么排除法，xx 法，都了然于胸了。