# 历年 SHL 真题及解析

**汇率题**

一、The table below shows the currency rates in operation for two successive years

| Value of 1 Great British Pound (GBP) | | |
|---|---|---|
| Currency | Year 1 | Year 2 |
| Euro （EUR） | 1.52 | 1.62 |
| US Dollar (USD) | 1.60 | 1.43 |
| Japanese Yen (JPY) | 158 | 187 |
| Australian Dollar (AUD) | 2.55 | 2.72 |
| Thai Baht (THB) | 65.4 | 61.8 |
| Hong Kong Dollar (HKD) | 12.3 | 11.1 |
| Malaysian Ringgit (MYR) | 7.62 | 5.44 |

1、 A traveler buys 8,000 Thai Baht in Year 1, and then in Year 2 converts some of this amount to 100 Euros and the remainder into GBP. What is the amount converted into GBP?

| A 34.54 GBP | B 52.75 GBP | C 67.72 GBP | D 75.25 GBP |
|---|---|---|---|
| E 80.60 GBP | F 89.43 GBP | G 95.27 GBP | H 104.28 GBP |

答案：C。游客在第一年买了 8000 泰铢后，在第二年换了 100 欧元，剩下的换了英镑，在已知各个汇率下，可知他总共换到了：8000/61.8-100/1.62=67.72 英镑。注意，在第二年泰铢换英镑的时候，需要用第二年的汇率而不是第一年的。

2、 If 1000 GBP of Euros were purchased in Year 1, what would be their approximate value in Hong Kong Dollars (HKD) when exchange in Year 2?

| A 222 HKD | B 2,462 HKD | C 4,600 HKD | D 6,340 HKD |
|---|---|---|---|
| E 9,488 HKD | F 10,415 HKD | G 16,872 HKD | H 18,696 HKD |

答案：F。第一年 1000 英镑可以买到 1000*1.52=1520 的欧元，那么第二年由于汇率变动将可以换到：1520/1.62*11.1=10415 的港元。

3、 Between Year 1 and Year 2, what was the approximate change in value (expressed as a percentage) of the Thai Baht in relation to Great British Pound (GBP)?

| A Up 3.5% | B Down 3.6% | C Down 5.5% | D Up 5.8% |
|---|---|---|---|
| E Down 9.4% | F Up 10.4% | G Down 10.55% | H Up 10.58% |

答案：D。在第一年 1 英镑可以换到 65.4 泰铢，而第二年 1 英镑只能换到 61.8 的泰铢，这说明泰铢升值了，且升值了（65.4-61.8）/61.8=5.8%。

4、 In relation to Great British Pounds (GBP), which two currencies have shown the largest proportional change in value between Year 1 and Year 2?

| A Japanese Yen & US Dollar | B Japanese Yen & Malaysian Ringgit | C Euro & Thai Baht | D Euro & Malaysian Ringgit |
|---|---|---|---|
| E Malaysian Ringgit & US Dollar | F Hong Kong Dollar & Thai Baht | G Hong Kong Dollar & Euro | H US Dollar & Euro |

答案：B。目测法，看两年之间变化最大的，注意单位（全部看作是百分数）。

二、

|  | 01 May 1995 | |
|---|---|---|
|  | UK Pounds Sterling (£) | US Dollars ($) |
| UK Pounds Sterling | 1.00 | 1.74 |
| US Dollar | 0.57 | 1.00 |
| Canadian Dollar | 0.50 | 0.87 |
| JP Yen | 0.005 | 0.008 |
| Euro | 0.69 | 0.84 |
| Russian Rubles | 0.020 | 0.035 |

1、 What was the approximate value in Pounds Sterling of 150 Canadian Dollars in 1995?

A £55　　B £75　　C £130　　D £300

答案：D。表中可以看到1英镑值0.5加元。

2、 Approximately How many Euros was 85 Russian Rubles worth in May 1995?
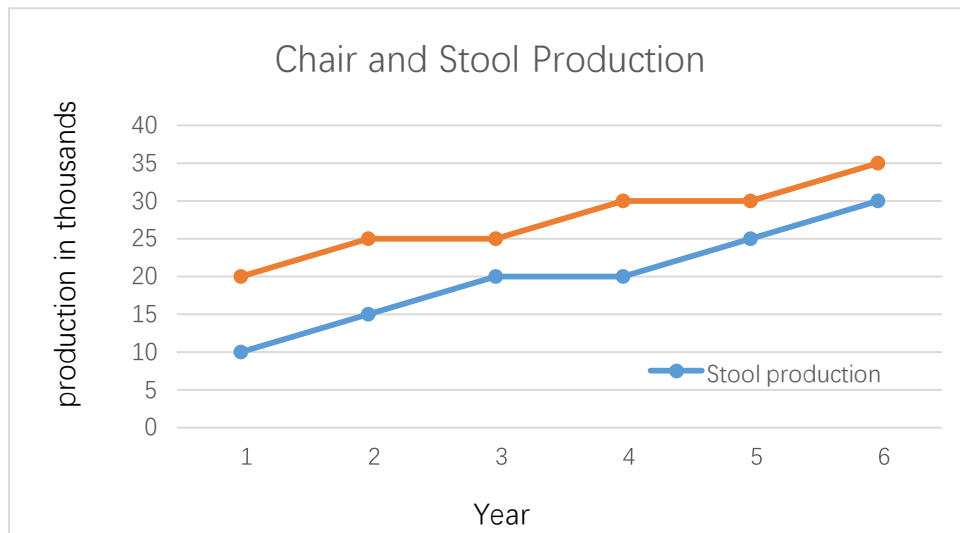
A €2.46　　B €2,933　　C €1,900　　D Cannot say

答案：必须将欧元及卢布转化为同一种货币计价，85卢布=85 x 0.020 = £1.7，1欧元=£0.69，所以85卢布=€2.464.

3、 Approximately how many more Canadian Dollars would you get for 100 UK Pounds Sterling than you would for 120 US Dollars?

A CAD$35　　B CAD$5 4　　C CAD$60　　D CAD$62

答案：D。100 Pounds = (100 ÷ 0.5) = 200 CAD，120 US = (120 ÷ 0.87) = 137.93 CAD，因此，100 英镑和 120 的美元之间大概差了 62 加币。

**产能题**

一、

Chair and Stool Production

1、By how many units did combined stool and chair production vary between years 5 and 6?
A: 10      B: no change       C: 10,000       D: 5,000

答案：C。第五年椅子和凳子总产量为：25,000+30,000，第六年椅子和凳子的总产量为：30,000+35,000，因此产量差为 65000-55000=10000.

2、If total production costs in years 4 were $142,000 and it costs $2.90 to produce one chair, how much did it cost to produce one stool?
A: $2.80      B: $2.75      C: $2.65       D: Cannot say
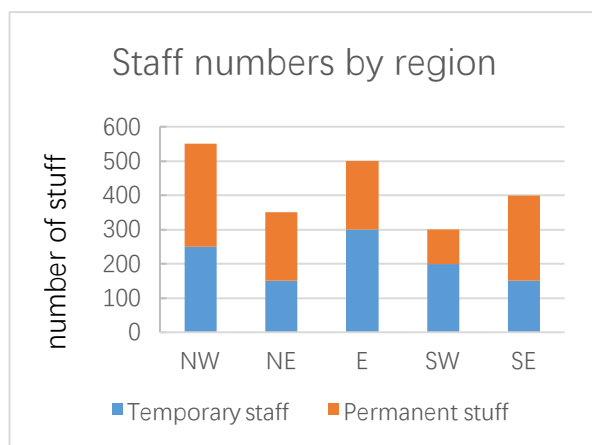
答案：B。第四年，椅子产量为 30000，生产成本： $2.90*30,000 = $87,000，问题中告诉我们总生产成本为$142,000，凳子的产量为 20,000，因此一张凳子的成本应该是：$55,000／20,000 = $2.75

3、 On average, what percent of total production did chairs account for over the whole six-year period?
A: 57.9%      B: 42.1%      C:52.1%       D:41.0%

答案：A。六年间椅子的产量为：20+25+25+30+30+35 = 165 千张，凳子的产量为：10+15+20+20+25+30 = 120 千张，因此，椅子占了总产量的比例为：165／(165+120) = 57.89%

二、The bar chart below shows the number of temporary and permanent staff working in five regional call centres:

Staff numbers by region

| Average number of calls taken per hour | | |
|---|---|---|
| region | Permanent staff | Temporary staff |
| NW | 20 | 16 |
| NE | 22 | 22 |
| E | 18 | 18 |
| SW | 28 | 25 |
| SE | 30 | 18 |

1、The actual number of calls taken per hour in Region SW fell 10% short of the target set- what was the target number of calls per hour?

| A 7,000 | B 7,500 | C 8,000 | D 8,500 |
|---|---|---|---|
| E 9,000 | F 9,500 | G 10,000 | H 10,500 |

答案：E。（28*200+25*100）/（100%-10%）=9000，此题先计算出每小时实际的电话次数，再根据实际次数与目标次数的差距计算出目标次数，因此，每小时目标电话次数为 9000 次。

2、An increase of 6% in both the number of temporary and permanent staff in Region NW is planned. If the average number of calls taken per hour stayed the same of all staff, what would be the increase in the total number of calls taken per hour?

| A 544 | B 566 | C 588 | D 610 |
|---|---|---|---|
| E 632 | F 654 | G 676 | H 698 |

答案：C。（20*250+16*300）*6%=588，先计算出 NW 地区所有员工的电话次数，再根据其增长比率计算出每小时增加的电话次数，因此，每小时增加的电话总次数为 588 次。

3、If the ratio of permanent to temporary staff in Region SE was the same as for Region E, but the total number of staff remained the same, what would be the change in calls handled per hour?

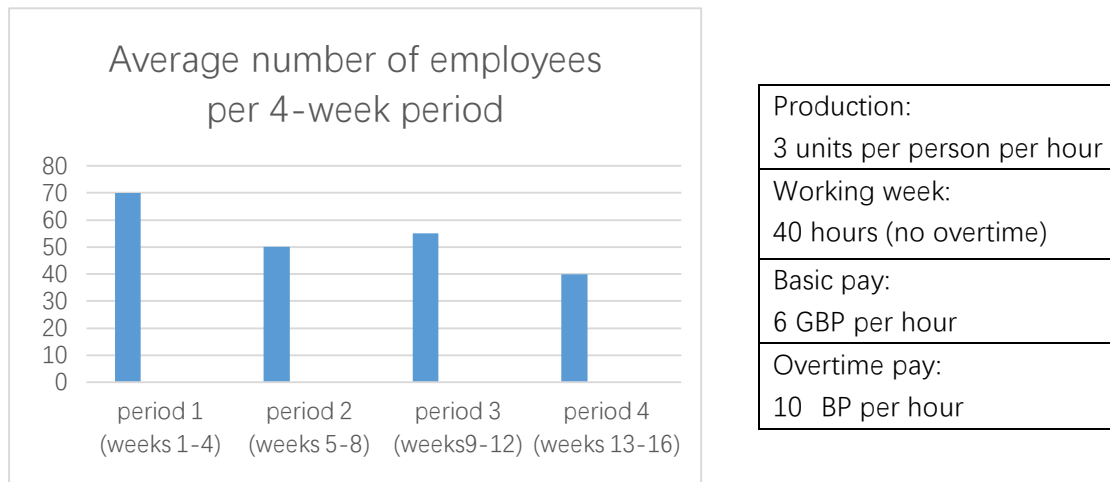| A 1,040 | B 1,080 | C 1,120 | D 1,160 |
|---|---|---|---|
| E 1,200 | F 1,240 | G 1,280 | H 1,320 |

答案：B。从题目中知道，E 区正式员工与临时员工的比例为 3：2，SE 区的总员工数为 400 人，其中正式员工 150 人，临时员工 250 人，为了使两个区正式员工与临时员工比例相同，SE 区的正式员工应该为：400*0.6=240，临时员工应该为：400*0.4=160。所以我们可以得出正式员工增加了 90 人，临时员工减少 90 人。因此 SE 区每小时的电话次数将增加 90*（30-18）=1080 次。

4、Which two regions had the highest total number of calls handled per hour by permanent staff?

| A Regions NW&NE | B Regions NW&E | C Regions NW&SE | D Regions E&SE |
|---|---|---|---|
| E Regions E&SW | F Regions SW&NW | G Regions SW&NE | H Regions SE&SW |

答案：E。SE 和 SW 的正式员工每小时接的电话次数是最高的，而且 SW 的正式员工人数多，所以总数上 SW 肯定比 SE 高，虽然 E 的每小时接电话数不高，但是人数最多，因此总数也很高。

三、The bar chart and figures below show a factory's productivity report over sixteen weeks, divided into 4 equal 4-week periods:



| Production: |
|---|
| 3 units per person per hour |
| Working week: |
| 40 hours (no overtime) |
| Basic pay: |
| 6 GBP per hour |
| Overtime pay: |
| 10 BP per hour |

1、what was the difference in units produced between Periods 1 and 2, if no overtime was worked?

| A 4,800 | B 5,600 | C 6,400 | D 7,200 |
|---|---|---|---|
| E 8,000 | F 8,800 | G 9,600 | H 10,400 |

答案：G。已知在不加班情况下没人每周工作 40 小时，且每人每小时可以完成 3 个零件，那么时期 1 与时期 2 生成的零件差为：（70-50）*4*40*3=9600 个。

2、During Period 2 employees worked an average of 4 hours overtime per week, in addition to their standard 40 hours per week. What was the total pay bill for that Period?

| A 52,600 GBP | B 56,000 GBP | C 62,800 GBP | D 66,400 GBP |
|---|---|---|---|
| E 70,000 GBP | F 72,400 GBP | G 80,000 GBP | H 82,800 GBP |

答案：B。正常工作时间工资为每人 6GBP 每小时，加班工资为每人 10GBP 每小时，因此如果在时期 2 员工们每周额外加工 4 小时，那么这段时期需要付的工资为：50*40*4*6+50*4*4*10=56000 GBP。

3、If during Period 4 productivity fell to 2.4 units per person per hour, by how many would the workforce have to be increased by so as not to affect the total output for that Period?

| A 6 | B 7 | C 8 | D 9 |
|---|---|---|---|
| E 10 | F 11 | G 12 | H 13 |

答案 :E。如果在时期 4 每人每小时的产能降低到 2.4 个零件，为了不降低时期 4 的总产出，人力需要增加：3/2.4*40-40=10 人

4、The factory is considering cutting the working week to 38 hours. If they had done this for Periods 3 and 4, how many fewer units would have been produced, if no overtime were worked?

| A 2,180 | B 2,230 | C 2,280 | D 2,330 |
|---------|---------|---------|---------|
| E 2,380 | F 2,430 | G 2,480 | H 2,530 |

答案：C。假设时期 3 和时期 4 里，每周每人正常工作时间减低到 38 小时，在不存在加班的情况下，总产出将会减少：（40-38）*4*3*（55+40）=2280 个。

四、The table below shows the production statistics for Ruritanian Gold Fields Ltd, over a six-year period:

| Year | Amount of mined ore (thousand tonnes) | Amount of gold milled from ore (gms/tonne) | Gold price (GBP per gm) |
|------|----------------------------------------|---------------------------------------------|--------------------------|
| 1 | 110 | 7.2 | 7.80 |
| 2 | 120 | 5.0 | 8.00 |
| 3 | 125 | 8.0 | 8.75 |
| 4 | 145 | 7.6 | 9.50 |
| 5 | 150 | 7.0 | 10.50 |
| 6 | 160 | 7.4 | 10.00 |

1、What was the overall percentage increase (to the nearest %) in the amount of mined ore, from Year 1 to Year 5?

| A 20% | B 24% | C 28% | D 32% |
|-------|-------|-------|-------|
| E 36% | F 40% | G 44% | H 48% |

答案：E。从第一年到第五年，五年间开采矿石量的增长率为：（150-110）/110=36%。

2、If the total cost of gold production in Year 2 was 1 million GBP, how much ore would need to be mined and milled in that year, so that the gold produced would meet this cost?

| A 10,000 tonnes | B 12,500 tonnes | C 15,000 tonnes | D 17,500 tonnes |
|-----------------|-----------------|-----------------|-----------------|
| E 20,000 tonnes | F 22,500 tonnes | G 25,000 tonnes | H 27,500 tonnes |

答案：G。如果第二年淘金成本为 1 百万英镑，根据当时的金价及矿石中金子的开采量，至少需要开采：1000000/8/5=25000 吨的矿石。

3、If the general inflation rate between Year 4 and Year 5 was 10%, by how much was the increase in the price of gold above that account for by inflation?

| A 0.05 GBP | B 0.11 GBP | C 0.17 GBP | D 0.24 GBP |
|------------|------------|------------|------------|
| E 0.31 GBP | F 0.37 GBP | G 0.44 GBP | H 0.51 GBP |

答案：A。如果第四年到第五年间的通胀率为 10%。那么在考虑通胀的情况下，金价上升了：
10.5-9.5*（1+10%）=0.05。

4、Which 2 years generated the worst financial return per thousand tonnes of ore mined?

| A   Years 1&2 | B   Years 2&3 | C   Years 3&4 | D   Years 4&5 |
|---|---|---|---|
| E   Years 5&6 | F   Years 1&6 | G   Years 2&5 | H   Years 2&4 |

答案：A。目测法，第一年及第二年的价格最低，产量也最低。

## 销售题
一、

| Cost of item | Items on display | |
|---|---|---|
| ($) | Superstore A | Superstore B |
| 0-1.99 | 15% | 19% |
| 2-4.99 | 31% | 33% |
| 5-19.99 | 22% | 18% |
| 20-99.99 | 19% | 19% |
| 100-999.99 | 12% | 11% |
| Above 1,000 | 1% | 0% |
| Total items | 10,600 | 94,00 |

1、 If the number of items on display for under $5 rose by 10% per year at Superstore A and 5% per year at Superstore B, what would be the difference between superstores in the number of items on sale for under $5 after 4 years?
A: 44    B: 293    C: 1,198    D: Cannot say

答案：C。成本$5 的情况下，A 超市的展出商品为 4876，B 超市的展出商品为 4888，由于 A 超市的增长率为 10%，B 超市的增长率为 5%，因此四年后，两个超市的差量为：$1,198。

2、 What percentage of all items on sale in both Superstores cost less than $20?
A: 68%    B: 64.8%    C:68.9%    D: 70.0%

答案：C。
A 超市: (15+31+22) % of 10,600=7,208
B 超市: (19+33+18) % of 9,400=6,580
因此，成本在 20 美元之下的商品销售比例为 68.94%。

3、If Superstore A were to increase the cost of ever item by $0.50, how many items would be on display for less than $2?
A: 795    B:80    C:614    D: Cannot say

答案：D。数据只给出了在特定价格区间的商品比例，因此对某个特定的商品我们不能确定他的价格。

二、The table below shows Coach Travel Limited's ticket prices and sales targets to three destinations over a 4-week period:

| Destination | Average price per ticket (GBP) | 4-week sales target (GBP) | Week 1 revenue (GBP) | Week 2 revenue (GBP) |
|---|---|---|---|---|
| Hopworth | 48 | 43,200 | 11,232 | 12,096 |
| Jumpford | 50 | 80,000 | 21,600 | 19,200 |
| Skipdown | 40 | 16,000 | 4,160 | 4,640 |

1、If the combined sales target to all three destinations over the current period is increased by 5%, what is the total amount of revenue that remains to be earned by the end of this four-week period in order to meet the target?

| A 53,232 GBP | B 63,232 GBP | C 73,232 GBP | D 83,232 GBP |
|---|---|---|---|
| E 93,232 GBP | F 103,232 GBP | G 113,232 GBP | H 123,232 GBP |

答案：C。三地区四周总的目标销售额为（43200+80000+16000）*105%=146160，而前两周已经达到的销售额为 11232+12096+21600+19200+4160+4640=72928，因此还剩 146160-72928=73232 的目标销售额需要完成。

2、For the next four-week period, the intention is to sell 120 tickets to Skipdown per week at the same average price. Compared to the current four-week period, by what percentage would the revenue target for Skipdown increase?

| A 20% | B 22% | C 24% | D 26% |
|---|---|---|---|
| E 28% | F 30% | G 32% | H 34% |

答案：A。Skipdown 下一个四周的目标销售额为：40*120*4=19200，而这四周的目标销售额为 16000，因此增长率为（19200-16000）/16000=20%。

3、How many fewer tickets to Hopworth would need to be sold if the average ticket price was increased to 50 GBP and the sales target was to increase to 44,000 GBP?

| A 20 | B 25 | C 30 | D 35 |
|---|---|---|---|
| E 40 | F 45 | G 50 | H 55 |

答案：A。Hopworth 目前的目标销售票数为 43200/48=900 张，如果销售额增加到 44000GBP 且每张票的价格增长至 50，那么其目标销售票数变为 44000/50=880 张，因此减少了 20 张。

4、If 25 seater coaches are used on the Jumpford route and all tickets on these coaches were sold, how many coach journeys would need to be made during the four-week period to reach the sales target?

| A 58 | B 60 | C 62 | D 64 |
|---|---|---|---|
| E 66 | F 68 | G 70 | H 72 |

答案 :D。Jumpford 的目标销售额为 80000，每张票的价格为 50GBP，若汽车座位为 25 座，则这四周中需要 80000/50/25=64 趟行程。

**增长率题**

一、The table below shows the commuter population and number of train users for New City:

|  | June | July | Aug | Sept | Oct |
|---|---|---|---|---|---|
| Total number of commuter (millions) | 3.20 | 2.40 | 2.20 | 2.50 | 3.20 |
| Total number commuting by train (millions) | 1.40 | 1.08 | 0.88 | 1.10 | 1.70 |
| Commuters using "Metro train" service (%) | 20 | 20 | 10 | 15 | 15 |

Note: "Metro train" user levels are based upon a proportion of those who commute using all train services.

1、Assuming the percentage growth trends in total commuters and train commuters between July and September were applied to the period between September and November, what would be the number of non-train commuters in November?

| A 1.32 million | B 1.36 million | C 1.40 million | D 1.44 million |
|---|---|---|---|
| E 1.48 million | F 1.52 million | G 1.56 million | H 1.60 million |

答案：E。七月到九月之间，总乘客的增长率为（2.50-2.40）/2.40，若九月到十一月的增长率保持不变，则十一月的总乘客数应该达到 (2.50-2.40)/2.40*2.50+2.50=2.640，同理可知，十一月的火车乘客数应该达到（1.10-1.08）/1.08*1.10+1.10=1.1200。因此，十一月份的非火车乘客应该达到 2.604-1.120=1.48 百万人次。

2、In October how many fewer people were non-train commuters compared to train commuters?

| A 0.2 million | B 0.25 million | C 0.3 million | D 0.35 million |
|---|---|---|---|
| E 0.4 million | F 0.45 million | G 0.5 million | H 0.55 million |

答案：A。已知 10 月份总乘客数为 3.20 百万人次，其中火车乘客数为 1.70 百万人次。因此 10 月份非火车乘客数比火车乘客数少了：1.70-（3.20-1.70）=0.2 百万人次。

3、If the number of rail commuters in November fell by 0.3 million on compared to October, how many rail commuters did not use "Metro train" services if rail commuters usage of "Metro train" services was 15%?

| A 0.99 million | B 1.09 million | C 1.19 million | D 1.29 million |
|---|---|---|---|
| E 1.39 million | F 1.49 million | G 1.59 million | H 1.69 million |

答案：C。已知 10 月份的火车乘客数为 1.70 百万人次，如果 11 月份的火车乘客人数减少 0.3 百万人次并且其中有 15%使用"Metro train"的服务，那么不使用"Metro train"服务的
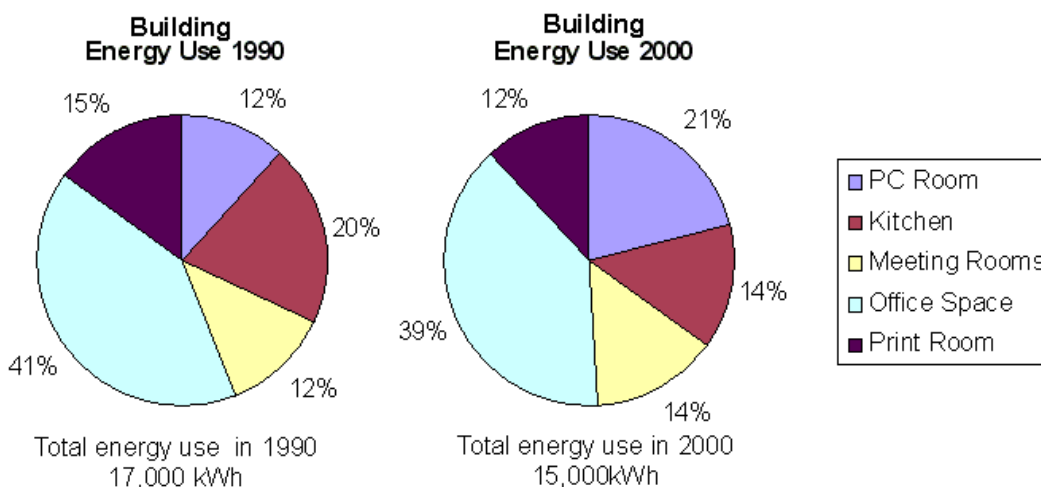
火车人数应为：(1.70-0.3) * (1-15%) =1.19 百万人次。

4、What percentage of commuters travelled by train during July but did not use "Metro train" services?

| A 30.0% | B 31.5% | C 33.0% | D 34.5% |
|---------|---------|---------|---------|
| E 36.0% | F 37.5% | G 39.0% | H 40.0% |

答案 :E。根据题中所述可得 7 月份火车乘客中不使用"Metro train"服务的乘客的比例为：
1.08*（1-20%）/2.40=36%。

二、



Building Energy Use 1990
Total energy use in 1990
17,000 kWh

Building Energy Use 2000
Total energy use in 2000
15,000kWh

Legend:
- PC Room
- Kitchen
- Meeting Rooms
- Office Space
- Print Room

1、Between 1990 and 2000, what was the increase in energy use for the PC Room, Meeting Rooms and Office Space combined?
A 50kWh    B 184kWh    C 188kWh    D Cannot say

答案：A。1990年电脑间、会客厅与办公区所有的能源用量为：(12% + 12% + 41%)
*17,000kWh = 11,050，2000年间，能源用量为： (21% + 14% + 39%) * 15,000kWh =
11,100，因此差量为50KWH。

2、 If the total energy usage today has reduced by 6% compared to that of 2000,by how much has today's usage reduced when compared to 1990?
A 82.9%    B 20.1%    C 17.8%    D Cannot say

答案：B。2000年能源总消耗量为：15,000kWh，由于今天的能源比以前节省了6%，所以今天的能源用量为：15,000/1.06 =14,150.9kWh。因此从1990年到今天能源节省了20.1%。

3、Which space experienced the smallest change in energy use between 1990 and 2000?
A Kitchen    B Print Room    C Meeting Rooms    D PC Room

答案：C。目测法可以排除掉 PC ROOM 和 KITCHEN。

三、

| Sector | Male | Female |
|---|---|---|
| Voluntary Work | 41,000 | 68,000 |
| IT | 121,000 | 107,000 |
| Engineering | 398,000 | 105,000 |
| Legal Services | 273,000 | 251,000 |
| Healthcare | 227,000 | 271,000 |
| Business Services | 186,000 | 124,000 |
| Self Employed | 45,000 | 62,000 |
| Unemployed | 52,000 | 43,000 |
| Total | 1,343,000 | 1,031,000 |

1、Approximately, what percentage of the people sampled are unemployed?
A 7%　　B 5%　　C 6%　　D 4%

答案：D。总失业人数= 52,000 + 43,000 = 97,000，样本总人数= 1,343,000 + 1,031,000 = 2,374,000。因此失业率为：97,000 ÷ 2,374,000 = 4.086%

2、 If it is predicted that the number of females employed in IT will rise by 10% every year, but the number of males stays the same, what percent of IT employees would be female after a three year period?
A 54.1%　　B 53.5%　　C 85.0%　　D 45.5%

答案：A。如果女性IT就业者增加10%，那么三年后女性IT就业者将达到142417，那么女性IT就业者比率将达到：142417/263417=54.07%。

3、 What is the ratio of males to females employed in Business Services?
A 5:3　　B 2:1　　C 3:2　　D 5:4

答案：C。男性商业就业者为 186000 人次，女性为 124000 人次，因此男女商业从业数比率为 3：2.

四、

| Town | | Aug | Sep | Oct | Nov | Average Cost per accident (£) |
|---|---|---|---|---|---|---|
| Ribley | Number of accidents | 8 | 6 | 12 | 10 | 1,900 |
| | Vehicles on road* | 85 | 76 | 79 | 81 | 1,900 |
| Wartop | Number of accidents | 14 | 18 | 4 | 20 | 3,200 |
| | Vehicles on road* | 112 | 101 | 89 | 117 | 3,200 |
| Surren | Number of accidents | 6 | 20 | 9 | 21 | 1,050 |
| | Vehicles on road* | 96 | 104 | 119 | 125 | 1,050 |

*In thousands

1、 What was the average accident cost per vehicle on the road in Ribley in November?
A £0.23      B £0.47      C £15.40      D £2.30

答案：A。Ribley总的事故成本为10 x £1,900 = £19,000，马路上车辆数为81,000，因此每辆车的事故成本为£19,000 ÷ 81,000 = £0.2346。

2、 Comparing Wartop with Surren, what was the difference in accident cost per vehicle on the road in October?
A 3.4p      B 6.4p      C £64.60      D £0.70

答案：B。10月份Wartop每辆车的事故成本为(£3,200 per accident x 4 accidents) ÷ 89,000 = £0.1438，Surren每辆车的事故成本为(£1,050 per accident x 9 accidents) ÷ 119,000 = £0.0794，因此差量为£0.064。

3、 What was the average accident cost per vehicle on road in all three towns in September?
A £0.17      B £0.32      C £0.94      D £20.50

答案：B。所有事故的总成本为(£1,900 x 6) + (£3,200 x 18) + (£1,050 x 20) =£90,000。总的车辆数为 76,000 + 101,000 + 104,000 =281,000。因此 9 月份，三个城镇每辆车的事故成本为£90,000 ÷ 281,000 = £0.320。