# Numerical Reasoning Free Test 1

**Questions Booklet** 

#### Instructions

This numerical reasoning test comprises **21 questions**, and you will have **21 minutes** in which to correctly answer as many as you can. Calculators are permitted for this test, and it is recommended you have some rough paper to work on.

You will have to work quickly and accurately to perform well in this test. If you don't know the answer to a question, leave it and come back to it if you have time. Each question will have five possible answers, one of which is correct. You may click Back and Next during the test to review or skip questions.

You can submit your test at any time. If the time limit is up before you click submit the test will automatically be submitted with the answers you have selected. It is recommended to keep working until the time limit is up.

Try to find a time and place where you will not be interrupted during the test. **The test will begin on the next page.** 



#### **Share Price Index**

Company	Today's Price (€)	Change from previous day (%)	Past 12 Maximum price (€)	months Minimum price (€)
Huver Co.	1,150	1.10	1,360	860
Drebs Ltd	18	0.50	22	11
Fevs Plc	1,586	-9.00	1,955	1,242
Fauvers	507	-1.00	724	464
Steapars	2,537	1.00	2,630	2,216

## **Dividend Index**

Dividend paid per share (€)	Huver Co.	Drebs Ltd	Fevs Plc	Fauvers	Steapars
Interim Dividend	0.83	0.44	0.34	0.09	0.48
Final Dividend	1.75	1.12	1.25	0.32	0.96

**Note:** the total annual dividend paid per share is the sum of the interim dividend and the final dividend.

Q1 Which share had the largest difference between highest and lowest price over the last 12 months?

- (A) Huver Co.
- (B) Drebs Ltd
- (C) Fevs Plc
- (D) Fauvers
- (E) Steapars



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**Note:** the total annual dividend paid per share is the sum of the interim dividend and the final dividend.

- Q2 What was yesterday's cost difference between 50 shares in Fevs plc and 100 shares in Steapars?
  - (A) €164,726
  - (B) €251,163
  - (C) €172,577
  - (D) €164,045
  - (E) None of these

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**Note:** the total annual dividend paid per share is the sum of the interim dividend and the final dividend.

Q3 Today's Drebs Ltd share price represents a 40% increase on the price one month ago. What was the Drebs Ltd share price a month ago?

(A) €22

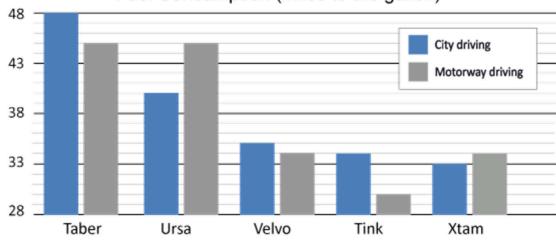
(B) €25.20

(C) €12.68

(D) €12.90

(E) €12.86

## Fuel Consumption (miles to the gallon)



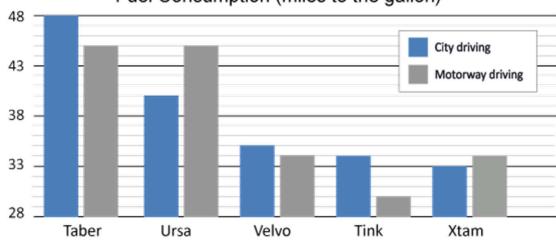
Car	Max. Speed (mph)	Cost to Purchase (£)
Taber	65	12,500
Ursa	60	15,250
Velvo	125	37,500
Tink	95	55,250
Xtam	110	62,500

Q4 If a driver travels an average of 4,250 miles per month driving along motorways in an Xtam car, what is the predicted annual consumption of fuel (in gallons)?

- (A) Cannot say
- (B) 1,500
- (C) 125
- (D) 150
- (E) 1,250



## Fuel Consumption (miles to the gallon)



Car	Max. Speed (mph)	Cost to Purchase (£)
Taber	65	12,500
Ursa	60	15,250
Velvo	125	37,500
Tink	95	55,250
Xtam	110	62,500

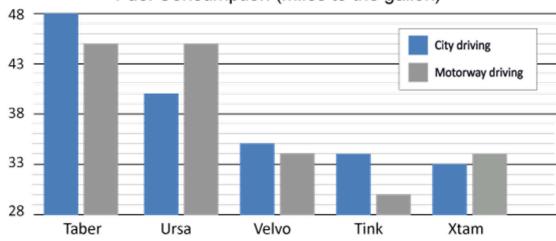
Q5 A car dealership has £600,000 to spend and wants to buy equal numbers of the Taber and Ursa cars. What is the largest number of each type of car that can be ordered?

- (A) 27
- (B) 48
- (C) 19
- (D) 21
- (E) 22



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## Fuel Consumption (miles to the gallon)



Car	Max. Speed (mph)	Cost to Purchase (£)
Taber	65	12,500
Ursa	60	15,250
Velvo	125	37,500
Tink	95	55,250
Xtam	110	62,500

**Q6** What is the ratio of the cost of a Taber: Velvo: Xtam?

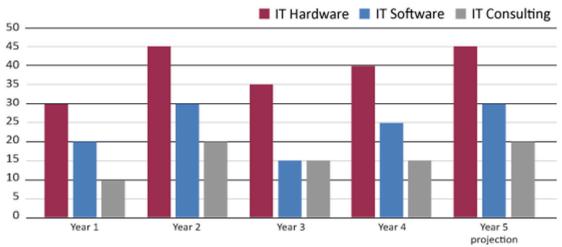
(A) 2:4:5

(B) 1:4:6

(C) 1:3:5

(D) 2:3:5

(E) 1:2:3

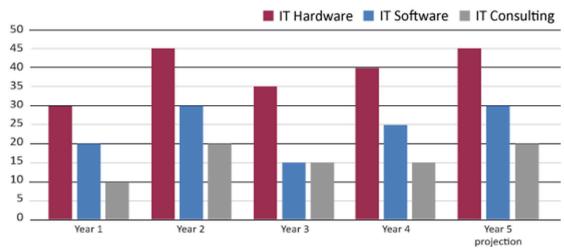


Two Legal Sector IT Firms Income for Consultancy Services (10,000s)

	Make Fit Ltd	Pure Gap Plc
Year 1	290	230
Year 2	180	310
Year 3	260	300
Year 4	320	290

Q7 Legal sector spending on IT hardware, IT software and IT consulting are all set to increase by the same amounts in Year 6 as they did from Year 4 to Year 5. Assuming this is the case, what is the total legal sector spend in Year 6 on these three IT areas combined?

- (A) £75 million
- (B) £85 million
- (C) £95 million
- (D) £105 million
- (E) £110 million



Two Legal Sector IT Firms Income for Consultancy Services (10,000s)

	Make Fit Ltd	Pure Gap Plc
Year 1	290	230
Year 2	180	310
Year 3	260	300
Year 4	320	290

Q8 For years 1 to 3 inclusive, by how much did Make Fit Ltd's income from consultancy services differ from those of Pure Gap plc?

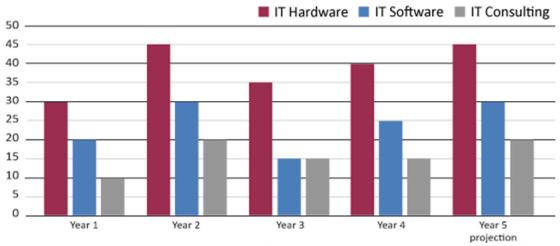
(A) £110 more

(B) £110,000 less

(C) £1,100,000 more

(D) £110 less

(E) £1,100,000 less

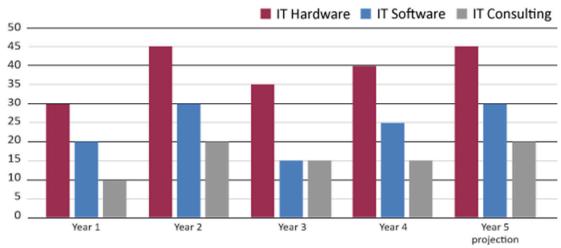


Two Legal Sector IT Firms Income for Consultancy Services (10,000s)

	Make Fit Ltd	Pure Gap Plc
Year 1	290	230
Year 2	180	310
Year 3	260	300
Year 4	320	290

- **Q9** Which of the following statements is false regarding legal sector spending between Year 4 and projected Year 5?
  - (A) IT consulting will increase by £5million.
  - (B) IT consulting will match that of year 2.
  - (C) IT software will exceed IT consulting.
  - (D) Spending on IT hardware will decline.
  - (E) None of these.





Two Legal Sector IT Firms Income for Consultancy Services (10,000s)

	Make Fit Ltd	Pure Gap Plc
Year 1	290	230
Year 2	180	310
Year 3	260	300
Year 4	320	290

Q10 In which year(s) did Make Fit Ltd and Pure Gap plc's combined IT consultancy income exceed £6million?

- (A) Year 1 and Year 4
- (B) Only Year 4
- (C) Year 1 and Year 3
- (D) Only Year 3
- (E) Year 3 and Year 4

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## January's Sales Turnover and Profit

IKE Computers (January)	Actual (£)	Target (£)
Sales Turnover	277,350	325,000
Sales Tax (14%)	38,829	45,500
Net Turnover	238,521	279,500
Labour Costs	166,000	175,000
Other Costs	36,000	41,000
Gross Profit	36,521	63,500

Q11 If actual labour costs rise so as to halve their difference from the target, what will be the change in actual Gross Profit?

- (A) Falls by £4,500
- (B) Rises by £4,500
- (C) No overall effect
- (D) Rises by £9,000
- (E) Falls by £9,000

## January's Sales Turnover and Profit

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Gross Profit	36,521	63,500

Q12 IKE Computers aim to grow monthly gross profit by 1.5%. If all costs remain constant, what will the sales turnover need to be in February to hit the target?

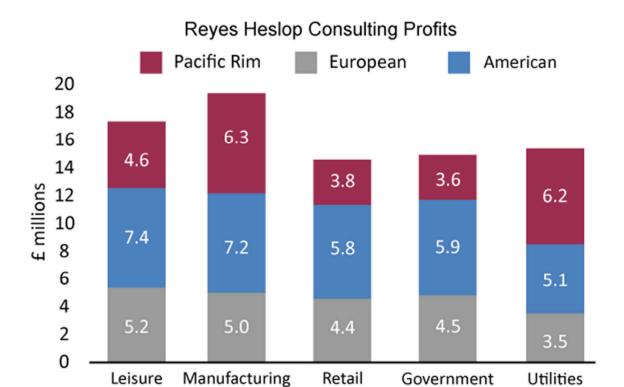
- (A) £242,099
- (B) £277,987
- (C) £38,555
- (D) £274,299
- (E) 288,000

## January's Sales Turnover and Profit

IKE Computers (January)	Actual (£)	Target (£)
Sales Turnover	277,350	325,000
Sales Tax (14%)	38,829	45,500
Net Turnover	238,521	279,500
Labour Costs	166,000	175,000
Other Costs	36,000	41,000
Gross Profit	36,521	63,500

Q13 If IKE Computers employed eighty permanent employees in January who were on the same salary, what would have been the effect on labour costs if they had replaced twenty permanent employees with interim staff each on monthly salaries of £3,000?

- (A) Cannot tell
- (B) Decrease of £130,000
- (C) Decrease of £20,750
- (D) Increase of £2,075
- (E) Increase of £18,500



Q14 Which sector represents approximately 19% of the profits from the five sectors shown?

- (A) Leisure
- (B) Manufacturing
- (C) Retail
- (D) Government
- (E) Utilities

#### Reyes Heslop Consulting Profits Pacific Rim European American 20 18 6.3 16 4.6 14 3.6 3.8 12 6.2 10 7.4 7.2 5.9 5.8 8 6 5.1 4 4.5 5.2 5.0 4.4 2 3.5

Q15 If the ratio of profit to turnover for Pacific Rim contracts was 2:15, what was the Government turnover in the Pacific Rim (in £100,000s)?

Retail

Government

Utilities

Manufacturing

(A) 36

0

Leisure

- (B) 27
- (C) 270
- (D) 360
- (E) 540

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Q16 Reyes Heslop had a target for Leisure profits to be a quarter of their total profits. Assuming profits in other areas remain the same, by how much did the Leisure profits miss this target?

Retail

Government

Manufacturing

(A) £1.8 million

Leisure

- (B) £2.4 million
- (C) £2.7 million
- (D) £3.2 million
- (E) £3.4 million

Utilities

#### Reyes Heslop Consulting Profits Pacific Rim European American 20 18 6.3 16 4.6 14 3.8 3.6 12 6.2 10 7.4 7.2 5.8 5.9 8 6 5.1 4 4.5 5.2 5.0 4.4 2 3.5 0

Q17 A competitor wants to takeover Reyes Heslop and offers a price of 8 times current profits. Reyes Heslop shareholders reject this offer and suggest a price that is 20% higher, what is this suggested price?

Retail

Government

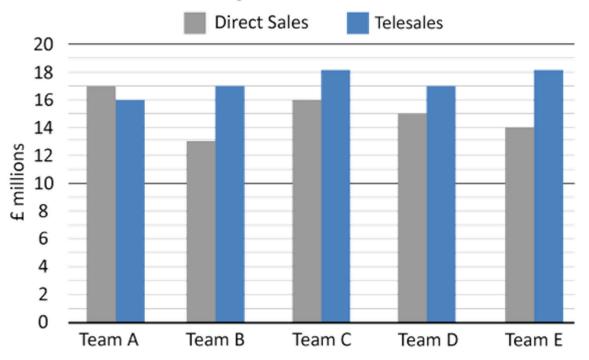
Utilities

Manufacturing

(A) £79 million

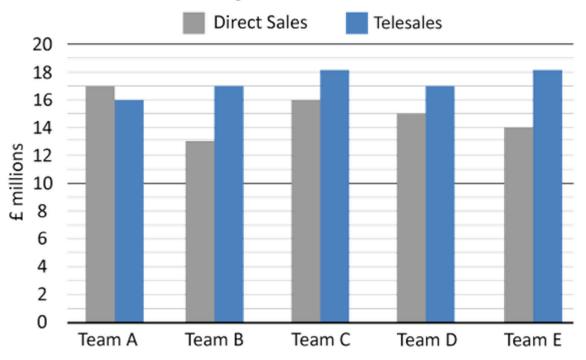
Leisure

- (B) £63 million
- (C) £628 million
- (D) £754 million
- (E) £502 million



**Q18** What is the difference between direct sales and telesales across the five teams combined?

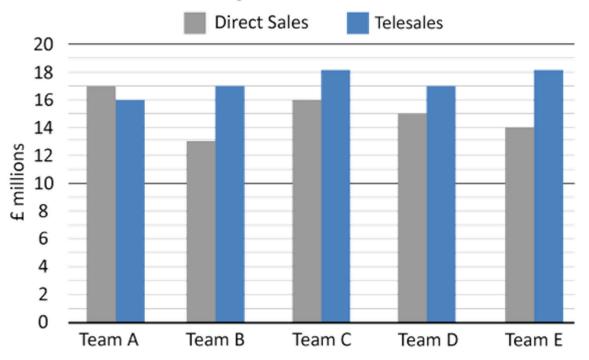
- (A) £10 million
- (B) £11 million
- (C) £12 million
- (D) £13 million
- (E) £14 million



Q19 If there are 50 direct sales and 65 telesales employees assigned to each of the Eastern region's teams A-E, what are the average sales per sales employee for the lowest performing team in terms of overall sales (to the nearest £10,000)?

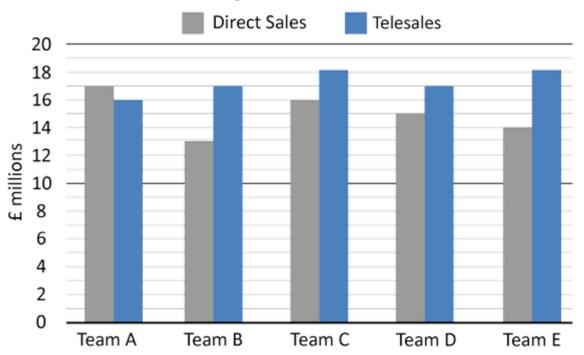
- (A) Cannot tell from the data
- (B) £200,000 (direct); £340,000 (telesales)
- (C) £260,000 (direct); £260,000 (telesales)
- (D) £340,000 (telesales); £200,000 (direct)
- (E) £20,000 (direct sales); £30,000 (telesales)





Q20 If the Eastern Region's total sales represent 26% of the total for all regions, what are the total sales across all regions (to the nearest £million)?

- (A) £124 million
- (B) £142 million
- (C) £161 million
- (D) £619 million
- (E) £620 million



Q21 What are the total sales targets for next year across all five teams if the target is set as a 20% and 10% increase in this year's Direct Sales and Telesales respectively?

- (A) Direct (£75 million); Telesales (£86 million)
- (B) Direct Sales (£104 million); Telesales (£82 million)
- (C) Direct (£82 million); Telesales (£104 million)
- (D) Direct (£95 million); Telesales (£90 million)
- (E) Direct (£90 million); Telesales (£94.6 million)

#### -- End of Free Test --

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