Numerical Reasoning

Test 8

Questions Booklet

Instructions

This practice test contains **30 questions**, and you will have **30 minutes** to answer them.

Each question will have four possible answers, one of which is correct.

Calculators are permitted for this test. It's recommended to have some rough paper for your calculations. 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.

Try to find a time and place where you will not be interrupted during the test. When you are ready, turn to the next page and begin.

	Exchange Rate (to the £)				
	Week 1	Week 2	Week 3	Week 4	Week 5
Euro €	1.2	1.26	1.3	1.34	1.28
US $	1.64	1.69	1.74	1.84	1.76
Japanese Yen	123.2	128.6	134.8	135	128.4
South African Rand	13.4	13.8	13.2	13.6	14.2

Q1 What was a Japanese Yen worth in Euros in Week 3?

(A) €0.01
(B) €0.05
(C) €0.10
(D) €0.15
(E) €1.00

	Exchange Rate (to the £)				
	Week 1	Week 2	Week 3	Week 4	Week 5
Euro €	1.2	1.26	1.3	1.34	1.28
US $	1.64	1.69	1.74	1.84	1.76
Japanese Yen	123.2	128.6	134.8	135	128.4
South African Rand	13.4	13.8	13.2	13.6	14.2

Q2 How much is 5,000 South African Rand worth in Week 4 in US $?

(A) $199.81
(B) $367.65
(C) $476.65
(D) $599.18
(E) $676.48

	Exchange Rate (to the £)				
	Week 1	Week 2	Week 3	Week 4	Week 5
Euro €	1.2	1.26	1.3	1.34	1.28
US $	1.64	1.69	1.74	1.84	1.76
Japanese Yen	123.2	128.6	134.8	135	128.4
South African Rand	13.4	13.8	13.2	13.6	14.2

Q3 In Week two 10,000 Japanese Yen is converted into £. In Week 5 this is converted into what value in Euros?

(A) €110.00
(B) €104.82
(C) €99.53
(D) €77.76
(E) €60.75

	Exchange Rate (to the £)				
	Week 1	Week 2	Week 3	Week 4	Week 5
Euro €	1.2	1.26	1.3	1.34	1.28
US $	1.64	1.69	1.74	1.84	1.76
Japanese Yen	123.2	128.6	134.8	135	128.4
South African Rand	13.4	13.8	13.2	13.6	14.2

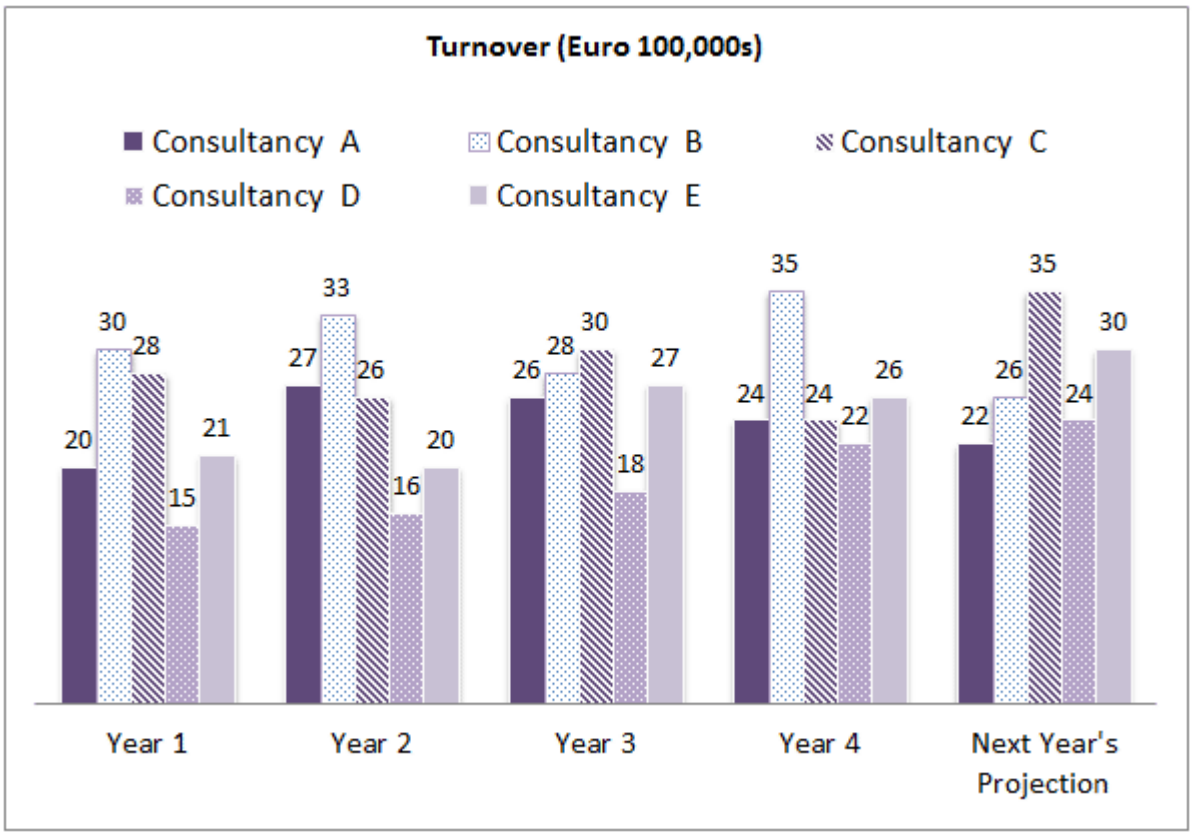
Q4 During Week 1 a traveller splits £2,100 equally into US $, Japanese Yen and South African Rand. How many £ does the traveller have on Week 3 if all the currencies are converted back into £ and he is charged a 5% fee for each transaction from one currency into another (to the nearest £100)?

(A) £1,700
(B) £1,800
(C) £1,900
(D) £2,000
(E) £2,100

	Exchange Rate (to the £)				
	Week 1	Week 2	Week 3	Week 4	Week 5
Euro €	1.2	1.26	1.3	1.34	1.28
US $	1.64	1.69	1.74	1.84	1.76
Japanese Yen	123.2	128.6	134.8	135	128.4
South African Rand	13.4	13.8	13.2	13.6	14.2

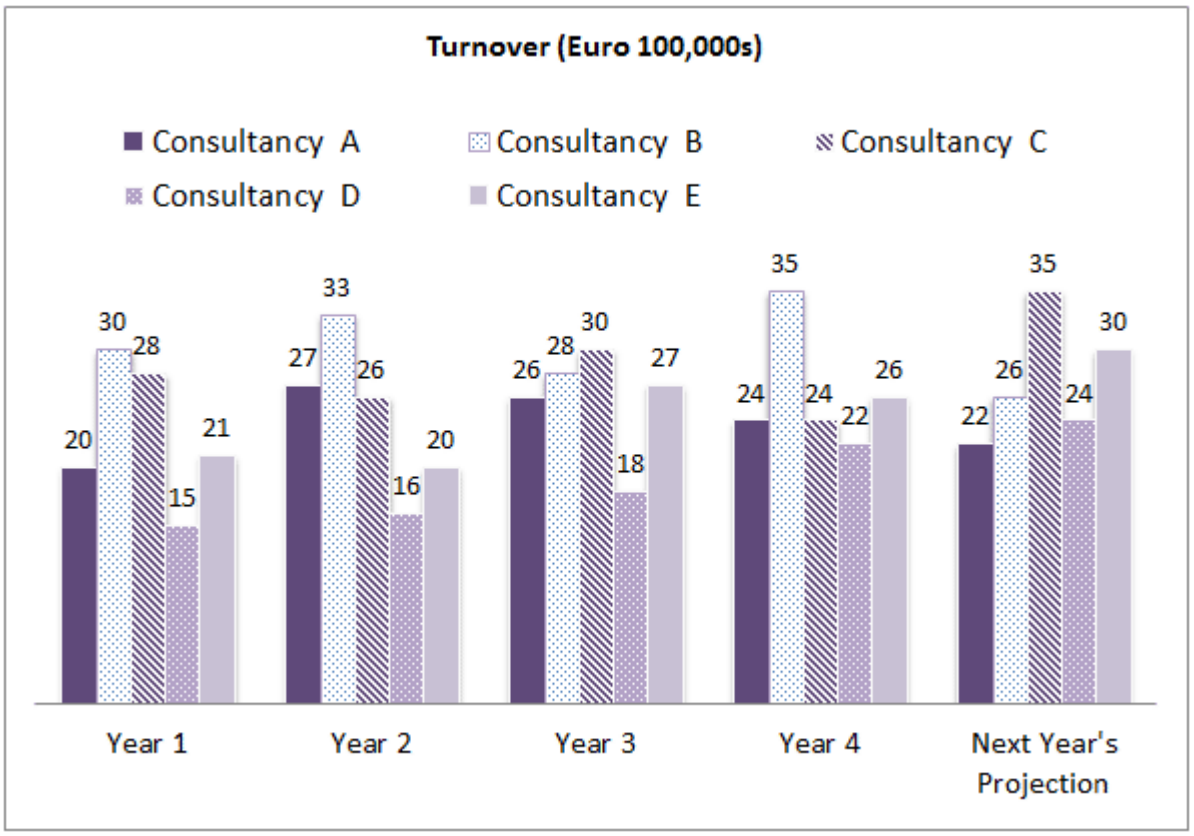
Q5 Which currency has shown the greatest proportionate change in value between Weeks 1 and 4?

(A) Euro
(B) US $
(C) Japanese Yen
(D) South African Rand
(E) Can't tell from data



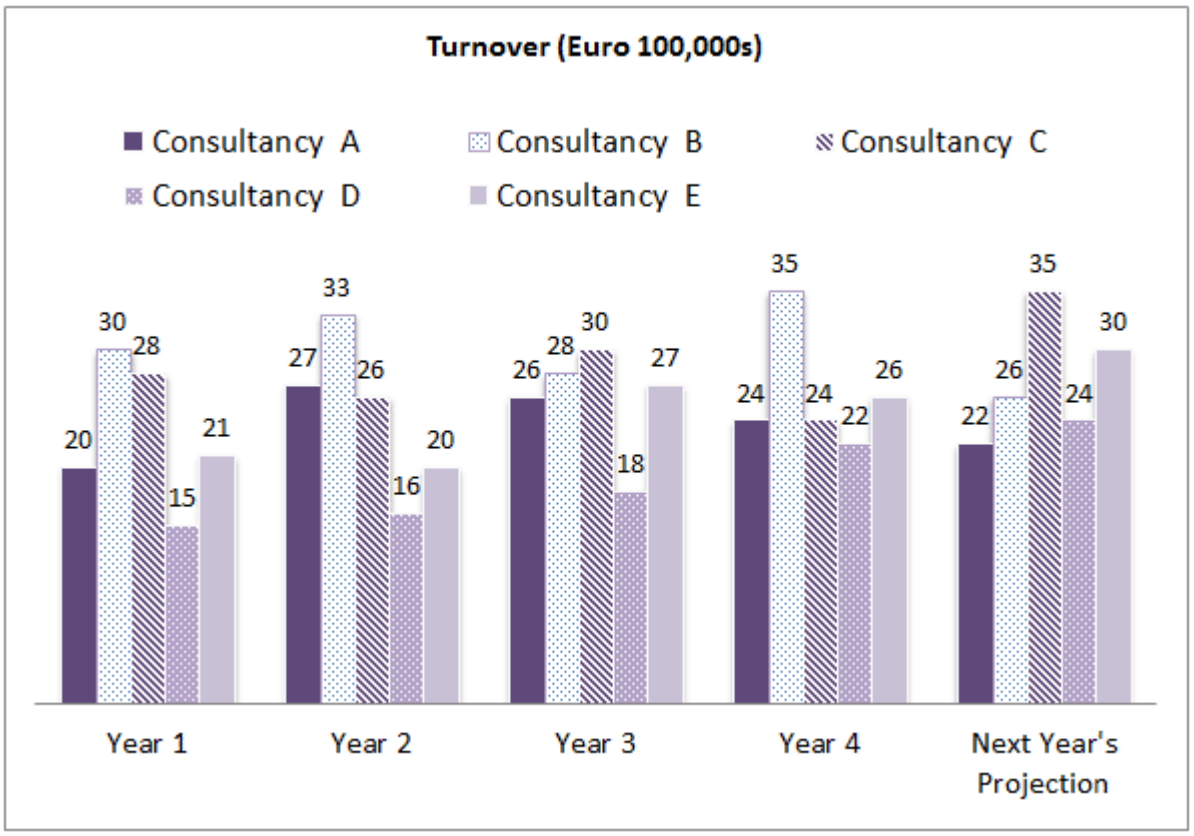
Q6 Next Year's turnover projection for Consultancies A-E combined represents what proportional change on Year 4's turnover for Consultancies A-E?

(A) 3.6%
(B) 4.2%
(C) 4.6%
(D) 5.2%
(E) 5.6%



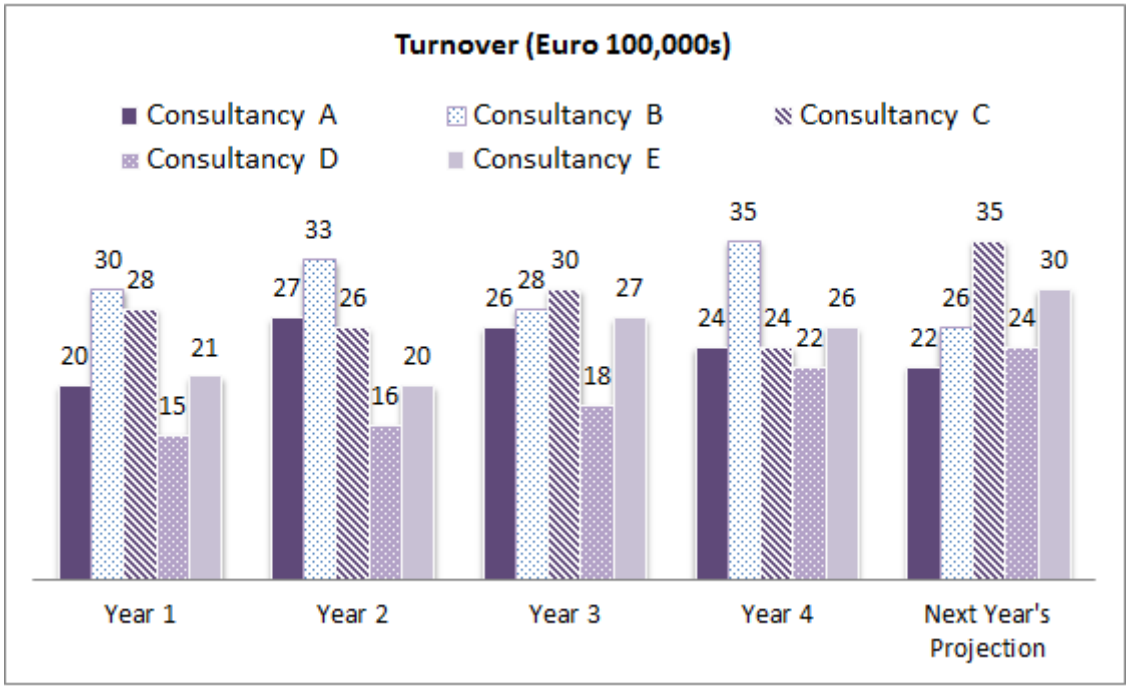
Q7 If, in Year 3, Consultancies A to E represent 60% of the marketplace by value of sales, what is the value of the marketplace excluding Consultancies A-E?

(A) €8.5 million
(B) €8.6 million
(C) €8.7 million
(D) €8.8 million
(E) Can't tell from the data



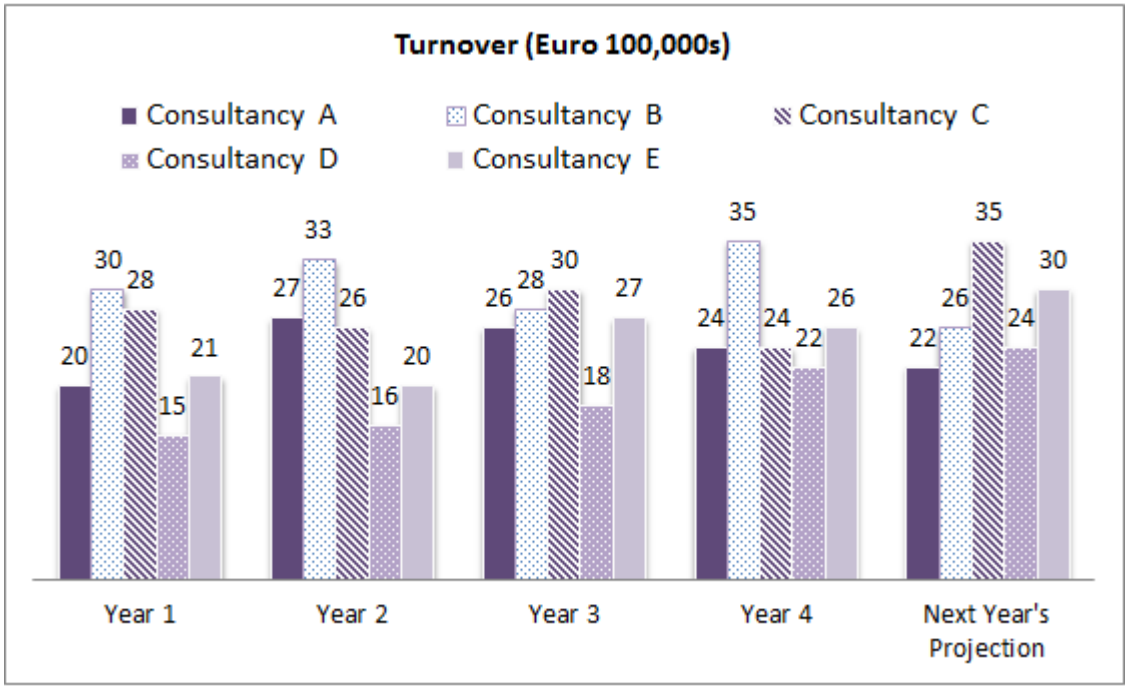
Q8 The turnover target for Consultancy B over the 5 year period shown is €16.5 million. By how much does turnover need to exceed Next Year's Projected turnover in order for the target to be met?

(A) €1.0 million
(B) €1.1 million
(C) €1.2 million
(D) €1.3 million
(E) None of these



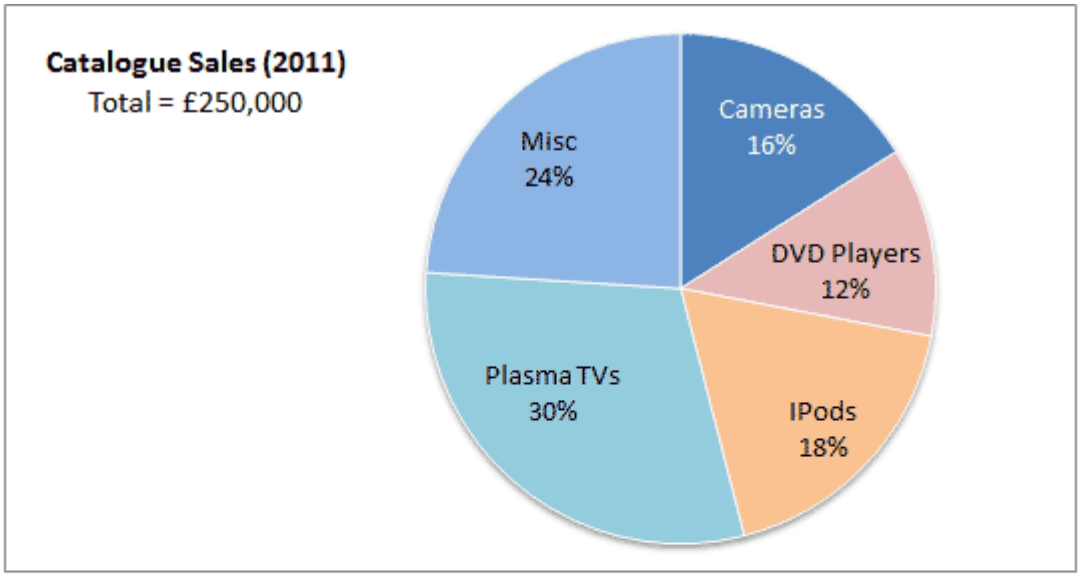
Q9 Next year, which company is projecting the smallest percentage change in its turnover?

(A) Consultancy A
(B) Consultancy B
(C) Consultancy C
(D) Consultancy D
(E) Consultancy E



Q10 What is the ratio of Year 3's Consultancy C's turnover to Consultancy E's turnover?

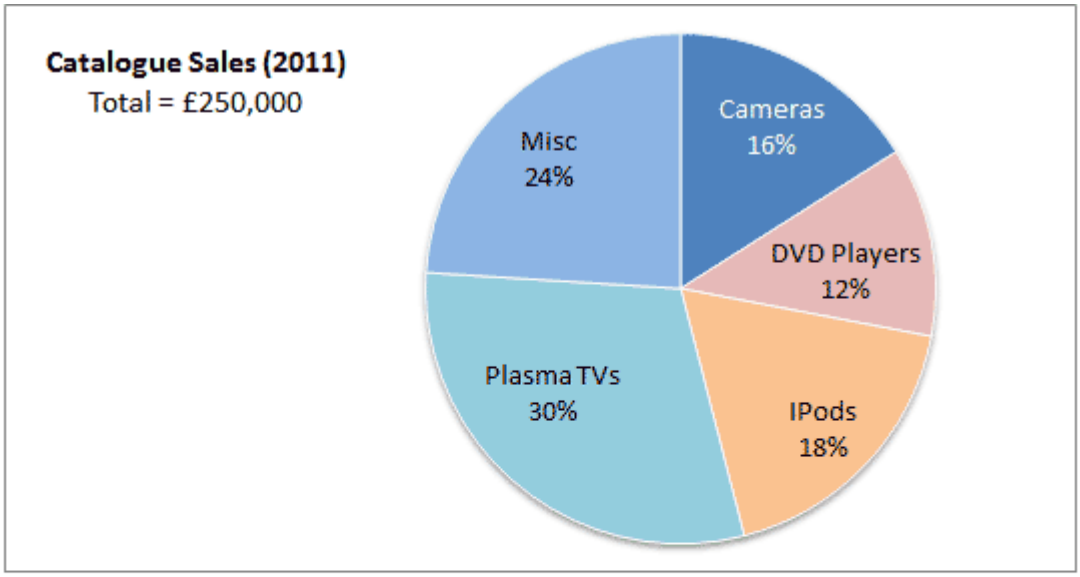
(A) 2 : 5
(B) 4 : 7
(C) 5 : 7
(D) 10 : 9
(E) 5 : 2



	Online Sales (2011)	High Street Sales (2011)
Cameras	£553,000	£336,000
DVD Players	£808,000	£483,000
IPods	£852,000	£644,000
Plasma TVs	£325,000	£456,000
Misc	£575,000	£678,000
Total	£3,113,000	£2,597,000

Q11 What % of total plasma TV sales are made online?

(A) 25%
(B) 28%
(C) 30%
(D) 38%
(E) 42%



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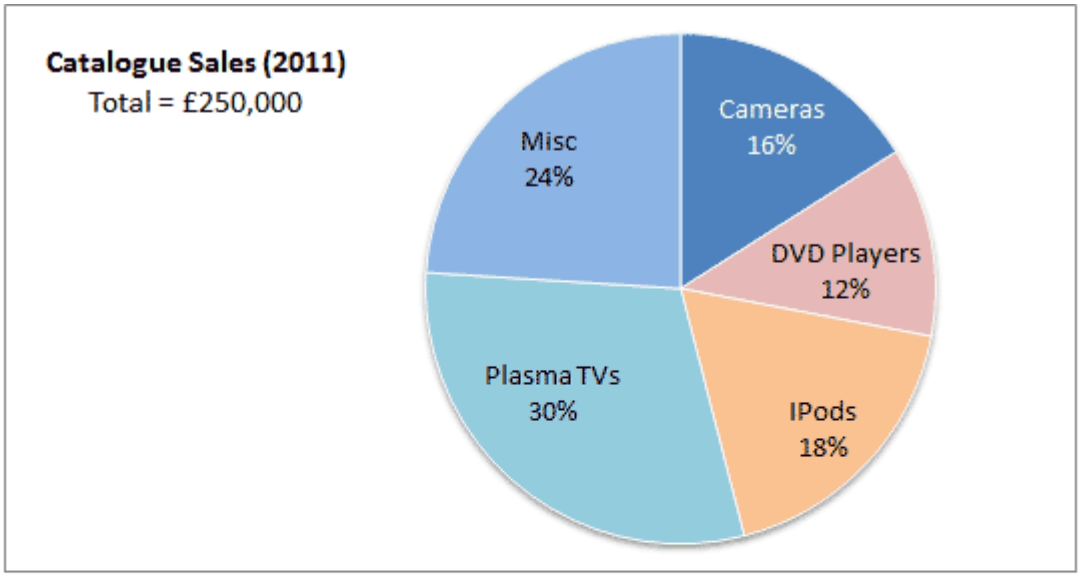
Misc	£575,000	£678,000
Total	£3,113,000	£2,597,000

Q12 What is the difference in value between total sales for IPods compared to cameras?

(A) £912,000
(B) £812,000
(C) £712,000
(D) £612,000
(E) £512,000



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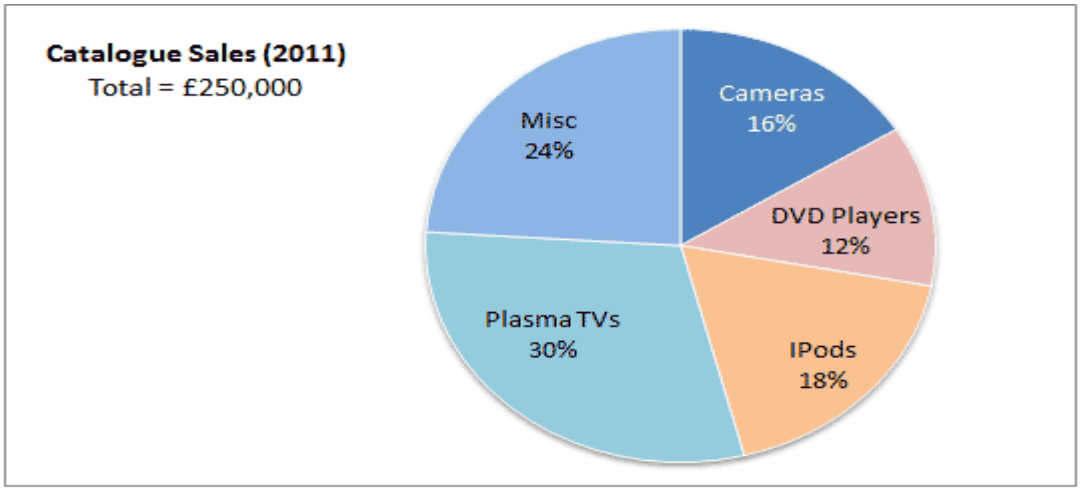
Total	£3,113,000	£2,597,000

Q13 If the High Street and Catalogue sales of DVD Players had been made online, what % of total Online sales would DVD Players represent?

(A) 28%
(B) 30%
(C) 32%
(D) 34%
(E) 36%



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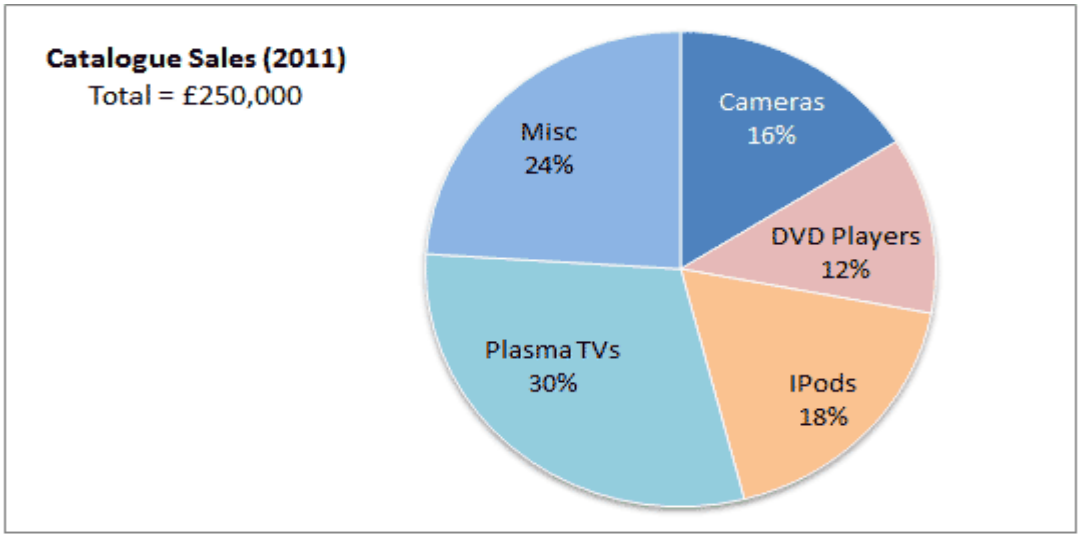
Misc	£575,000	£678,000
Total	£3,113,000	£2,597,000

Q14 In 2012 total Catalogue sales are forecast to increase by 1/4, total Online sales to increase by a 1/5th, and High Street sales to decrease by 12%. What will be the 2012 sales for Catalogue, Online and High Street combined (to the nearest £1,000)?

(A) £5,597,000
(B) £6,285,000
(C) £6,333,000
(D) £6,433,000
(E) £6,613,000



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Misc	£575,000	£678,000
Total	£3,113,000	£2,597,000

Q15 The profit made from selling cameras online compared to the High Street is in the ratio 9:7, and 15% of online camera sales is profit. What is the 2011 profit for High Street camera sales?

(A) £36,291
(B) £64,517
(C) £66,980
(D) £72,428
(E) £82,950

Expenses by Department (£)	Number of staff	Quarter				Annual Expense Budget
		1	2	3	4	
HR	3	1,053	1,680	1,305	1,346	6,500
Marketing	6	4,790	3,706	3,652	4,309	16,000
Sales	12	6,825	6,021	5,091	5,245	22,500
IT	5	1,160	1,042	938	956	4,500
Finance	7	4,257	4,830	4,545	4,463	20,000
R&D	4	1,169	1,009	1,755	1,821	6,000

Q16 Which Department has the highest expense budget per member of staff?

(A) HR
(B) Marketing
(C) Sales
(D) IT
(E) Finance

Expenses by Department (£)	Number of staff	Quarter				Annual Expense Budget
		1	2	3	4	
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Sales	12	6,825	6,021	5,091	5,245	22,500
IT	5	1,160	1,042	938	956	4,500
Finance	7	4,257	4,830	4,545	4,463	20,000
R&D	4	1,169	1,009	1,755	1,821	6,000

Q17 If the annual expense budget was evenly allocated for each Quarter, which Department is under budget by the highest amount in Quarter 4?

(A) HR
(B) Marketing
(C) Sales
(D) Finance
(E) R&D

Expenses by Department (£)	Number of staff	Quarter				Annual Expense Budget
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R&D	4	1,169	1,009	1,755	1,821	6,000

Q18 60% of the Sales Department's budgets for Quarters 1 and 4 was for attending a Sales Conference. The remainder of the budget was split equally between accommodation and travel costs. What were the Sales Department's travel costs for Quarters 1 and 4 combined?

(A) £2,414
(B) £2,500
(C) £3,500
(D) £4,828
(E) Can't tell from the data

Expenses by Department (£)	Number of staff	Quarter				Annual Expense Budget
		1	2	3	4	
HR	3	1,053	1,680	1,305	1,346	6,500
Marketing	6	4,790	3,706	3,652	4,309	16,000
Sales	12	6,825	6,021	5,091	5,245	22,500
IT	5	1,160	1,042	938	956	4,500
Finance	7	4,257	4,830	4,545	4,463	20,000
R&D	4	1,169	1,009	1,755	1,821	6,000

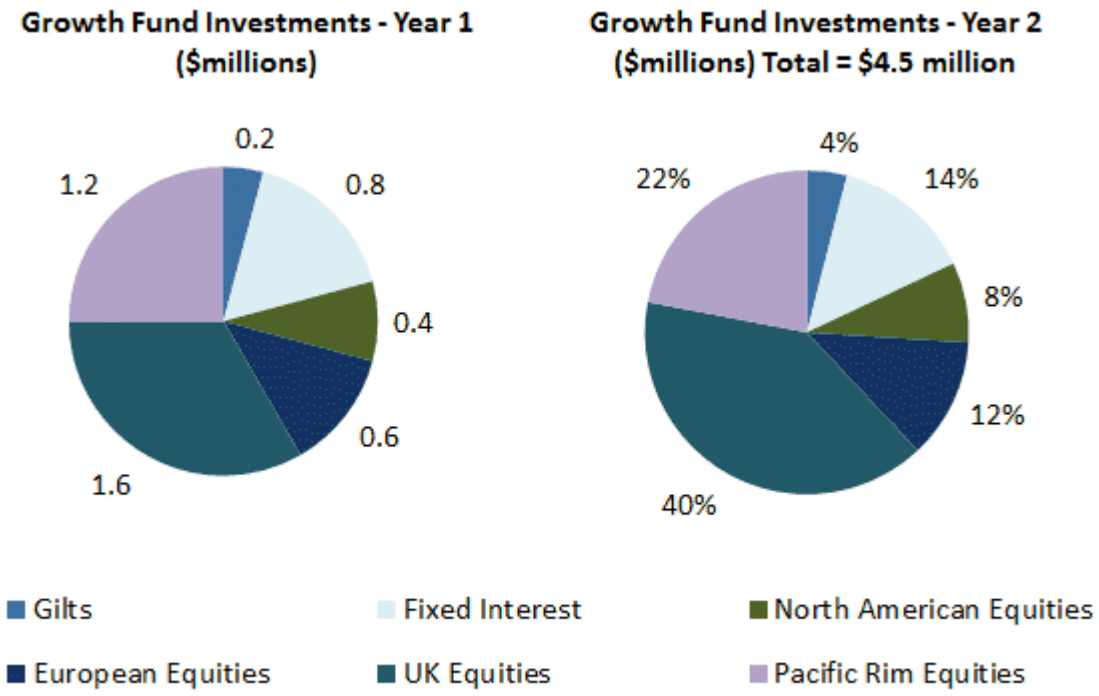
Q19 The Finance Department has receipts for £14,476 of its annual expenses. What percentage of the Finance Department's annual expenses do not have receipts?

(A) 5%
(B) 10%
(C) 15%
(D) 20%
(E) 25%

Expenses by Department (£)	Number of staff	Quarter				Annual Expense Budget
		1	2	3	4	
HR	3	1,053	1,680	1,305	1,346	6,500
Marketing	6	4,790	3,706	3,652	4,309	16,000
Sales	12	6,825	6,021	5,091	5,245	22,500
IT	5	1,160	1,042	938	956	4,500
Finance	7	4,257	4,830	4,545	4,463	20,000
R&D	4	1,169	1,009	1,755	1,821	6,000

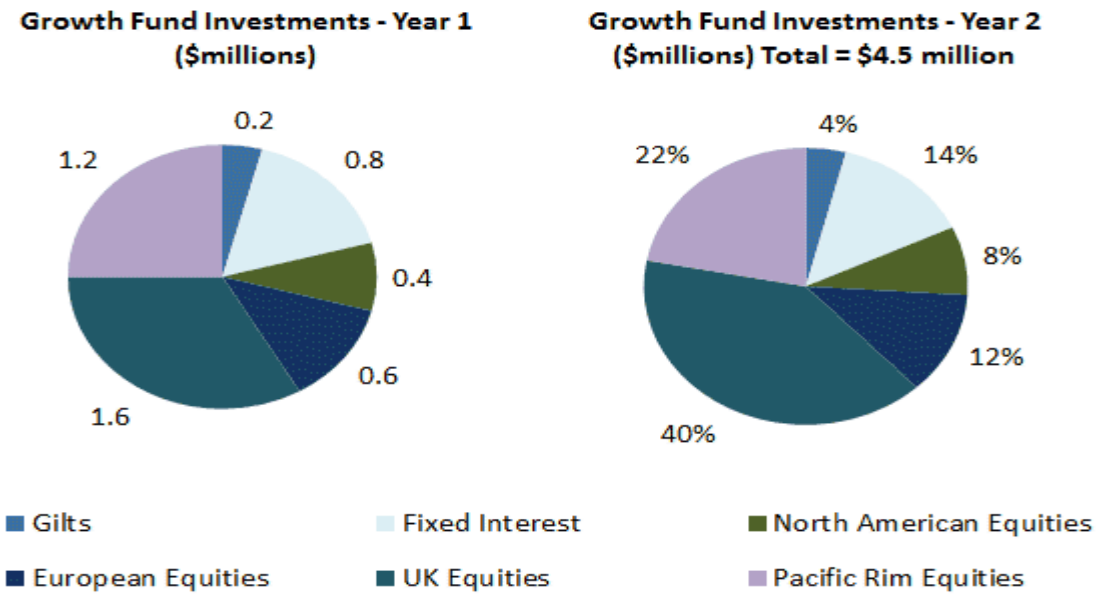
Q20 If the percentage changes in expenses that each Department exhibited between Quarters 3-4 continued into the first quarter of the next year, what would be that quarter's total expenses (to the nearest £100)?

(A) £17,100
(B) £19,100
(C) £19,600
(D) £20,600
(E) None of these



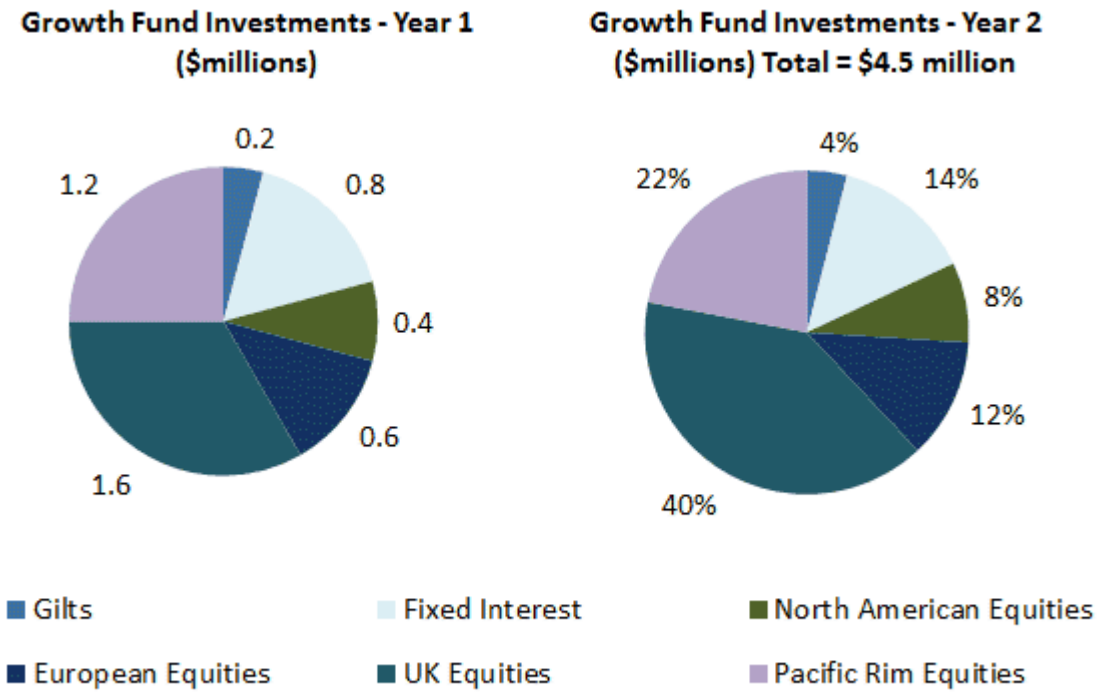
Q21 What was Year 2's decrease in the amount invested in North American and European Equities compared to Year 1?

(A) $10,000
(B) $100,000
(C) $110,000
(D) $111,000
(E) $111,100



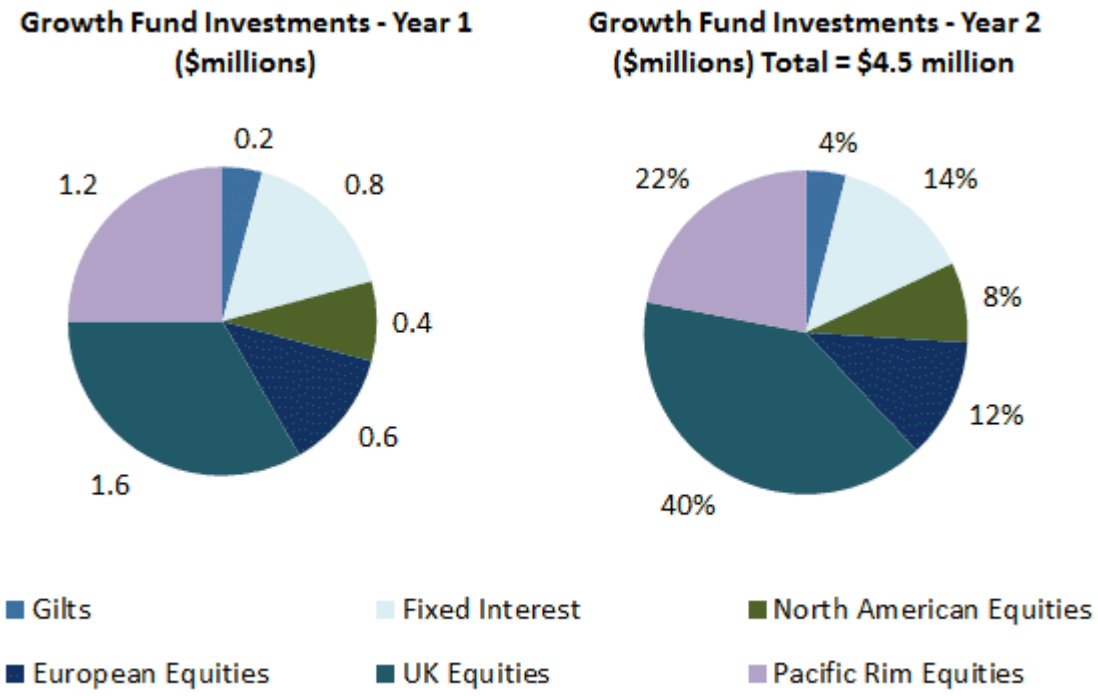
Q22 Which type of investment shows the largest difference between Year 1 and Year 2 in the proportion it contributed to the total Growth Fund?

(A) Gilts
(B) Fixed interest
(C) North American Equities
(D) UK Equities
(E) Pacific Rim Equities



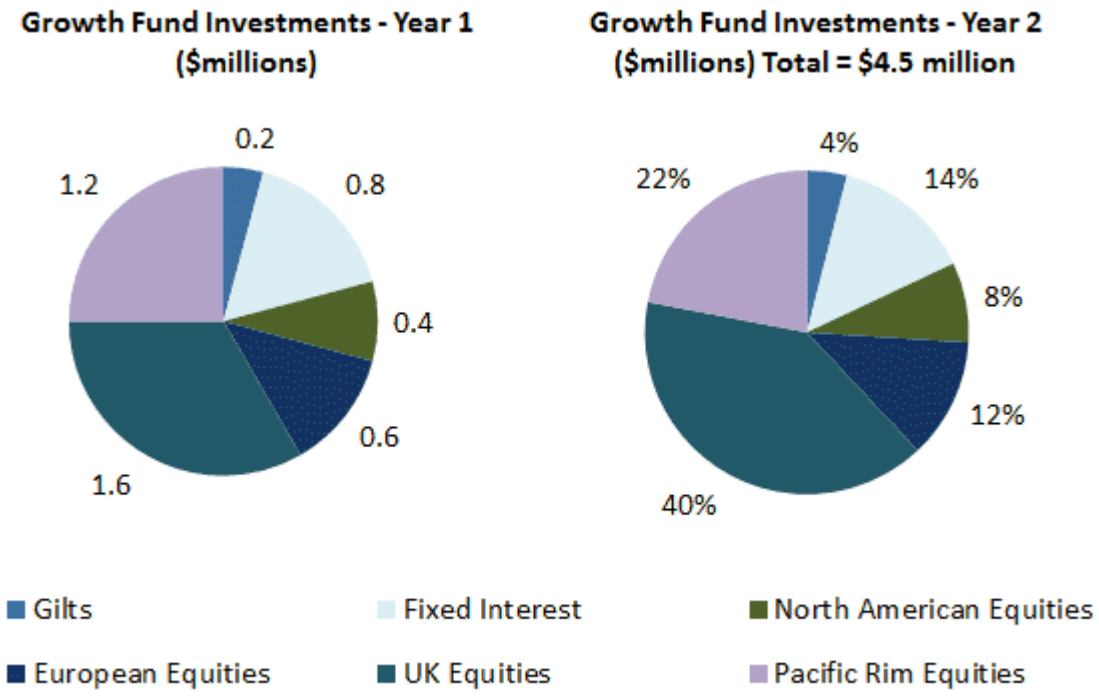
Q23 If the proportional change in the Growth Fund between Year 1 and Year 2 continued over subsequent years, what would be the projected Growth Fund value in Year 6?

(A) $3.48 million
(B) $3.51 million
(C) $3.71 million
(D) $5.73 million
(E) $5.95 million



Q24 If in Year 2 the amount invested in Year 1's Fixed Interest fund had been sold and converted into European Equity funds, what is the value of European Equity funds in Year 2? (Assume no charges are incurred).

(A) $540,000
(B) $700,000
(C) $800,000
(D) $1.24 million
(E) $1.34 million



Q25 In Year 3 the percentage of the Growth Fund held in each investment type is the same as in Year 1. The total value of the Growth Fund increases by 14% of the Year 2 value. What is the value of Year 3's holding in UK Equities?

(A) $1,530,000
(B) $1,170,000
(C) $1,710,000
(D) $2,040,000
(E) $2,030,000

£	Jan	Feb	March	April	May
Total sales	136,000	135,000	136,500	156,000	145,000
Operating expenses	61,000	63,000	65,000	50,000	55,000
Income	£75,000	£72,000	£71,500	£106,000	£90,000
Current assets	66,500	63,000	65,000	68,000	66,000
Property assets	36,000	35,500	36,000	38,000	36,500
Fixed assets	38,000	34,000	32,000	45,000	40,000
Total assets	£140,500	£132,500	£133,000	£151,000	£142,500
Liabilities	34,400	35,600	33,000	35,000	33,500

Working Capital to Total Assets ratio = (Current Assets – Liabilities)/ Total Assets

Q26 Which month has the lowest asset turnover value? (Use the formula Asset Turnover = Total Sales / Fixed Assets)

(A) January
(B) February
(C) March
(D) April
(E) May

£	Jan	Feb	March	April	May
Total sales	136,000	135,000	136,500	156,000	145,000
Operating expenses	61,000	63,000	65,000	50,000	55,000
Income	£75,000	£72,000	£71,500	£106,000	£90,000
Current assets	66,500	63,000	65,000	68,000	66,000
Property assets	36,000	35,500	36,000	38,000	36,500
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Total assets	£140,500	£132,500	£133,000	£151,000	£142,500
Liabilities	34,400	35,600	33,000	35,000	33,500

Working Capital to Total Assets ratio = (Current Assets – Liabilities)/ Total Assets

Q27 Compared to May's figures, Total sales for June show an increase of 8% and Operating expenses show a decrease of 7%. What is June's Income?

(A) £105,450
(B) £95,450
(C) £85,450
(D) £75,450
(E) Can't tell from the data

£	Jan	Feb	March	April	May
Total sales	136,000	135,000	136,500	156,000	145,000
Operating expenses	61,000	63,000	65,000	50,000	55,000
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Total assets	£140,500	£132,500	£133,000	£151,000	£142,500
Liabilities	34,400	35,600	33,000	35,000	33,500

Working Capital to Total Assets ratio = (Current Assets – Liabilities)/ Total Assets

Q28 Which month has the highest Working capital to Total assets ratio?

(A) January
(B) February
(C) March
(D) April
(E) May

£	Jan	Feb	March	April	May
Total sales	136,000	135,000	136,500	156,000	145,000
Operating expenses	61,000	63,000	65,000	50,000	55,000
Income	£75,000	£72,000	£71,500	£106,000	£90,000
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Total assets	£140,500	£132,500	£133,000	£151,000	£142,500
Liabilities	34,400	35,600	33,000	35,000	33,500

Working Capital to Total Assets ratio = (Current Assets – Liabilities)/ Total Assets

Q29 If the average value of Total assets between the months of April to June is £150,000, what is the value of Total assets in June?

(A) £154,500
(B) £155,000
(C) £155,500
(D) £156,000
(E) £156,500

£	Jan	Feb	March	April	May
Total sales	136,000	135,000	136,500	156,000	145,000
Operating expenses	61,000	63,000	65,000	50,000	55,000
Income	£75,000	£72,000	£71,500	£106,000	£90,000
Current assets	66,500	63,000	65,000	68,000	66,000
Property assets	36,000	35,500	36,000	38,000	36,500
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Total assets	£140,500	£132,500	£133,000	£151,000	£142,500
Liabilities	34,400	35,600	33,000	35,000	33,500

Working Capital to Total Assets ratio = (Current Assets – Liabilities)/ Total Assets

Q30 If the average monthly sales for the first five months of the year was the same for the months of June to December, what was the total annual sales?

(A) £1,500,400
(B) £1,600,400
(C) £1,700,400
(D) £1,800,400
(E) £1,900,400

End of test