

Numerical Reasoning

Test 2



Questions Booklet

Instructions

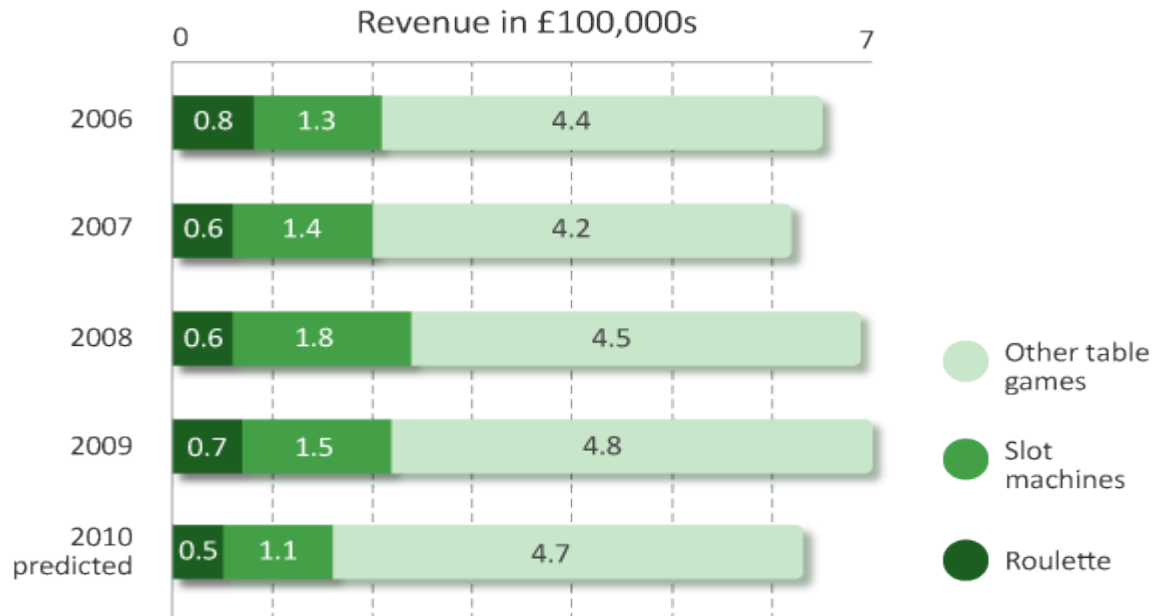
This practice test contains **30 questions**, and you will have **30 minutes** to answer them.

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.

Calewell Casino Revenue

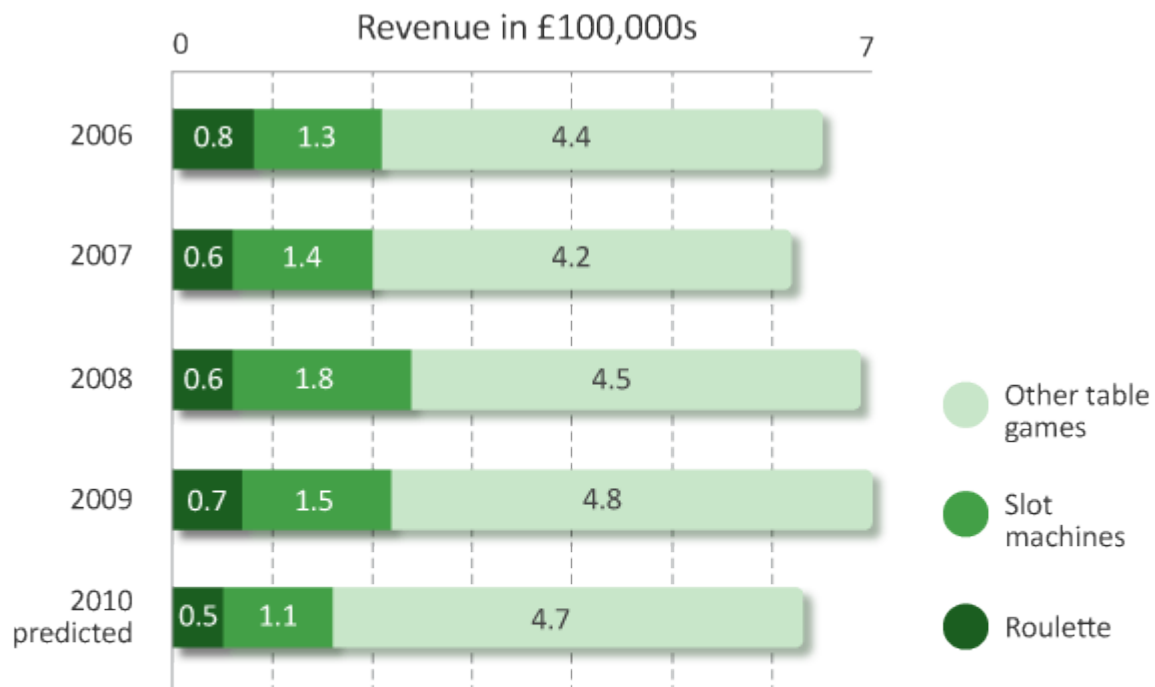


Year	Annual Attendance (100,000s)
2006	14.6
2007	15.2
2008	16.3
2009	16.8
2010 Predicted	16.5

Q1 How much did the combined revenue from Slot machines and Roulette differ from that of Other table games between 2006-2009 inclusive (in £millions)?

- (A) 0.9
- (B) 9.0
- (C) 9.2
- (D) 0.92
- (E) None of these

Calewell Casino Revenue

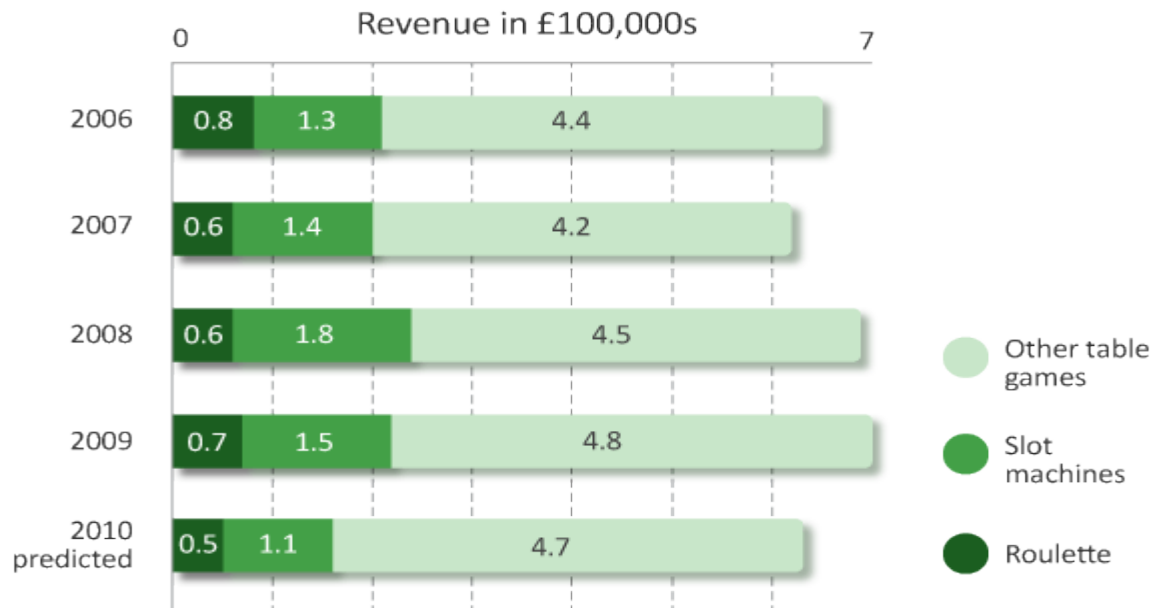


Year	Annual Attendance (100,000s)
2006	14.6
2007	15.2
2008	16.3
2009	16.8
2010 Predicted	16.5

Q2 What was the average amount gambled on Slot machines in 2007 by each individual who attended Calewall casino?

- (F) £90.00
- (G) £9.00
- (H) £0.90
- (I) £900.00
- (J) £0.09

Calewell Casino Revenue

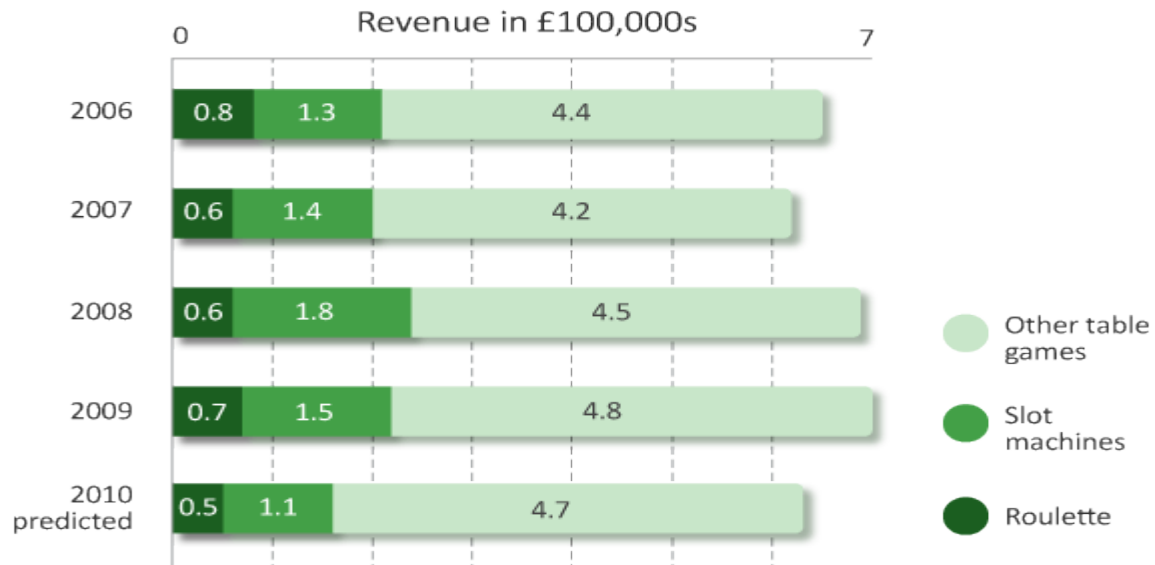


Year	Annual Attendance (100,000s)
2006	14.6
2007	15.2
2008	16.3
2009	16.8
2010 Predicted	16.5

Q3 There is a £15 entrance fee for each person gambling at Calewall casino. In which year, or years, was the entrance fee revenue less than £23 million?

- (A) 2006, 2007
- (B) 2007, 2008
- (C) 2007
- (D) 2006
- (E) None of these

Calewell Casino Revenue

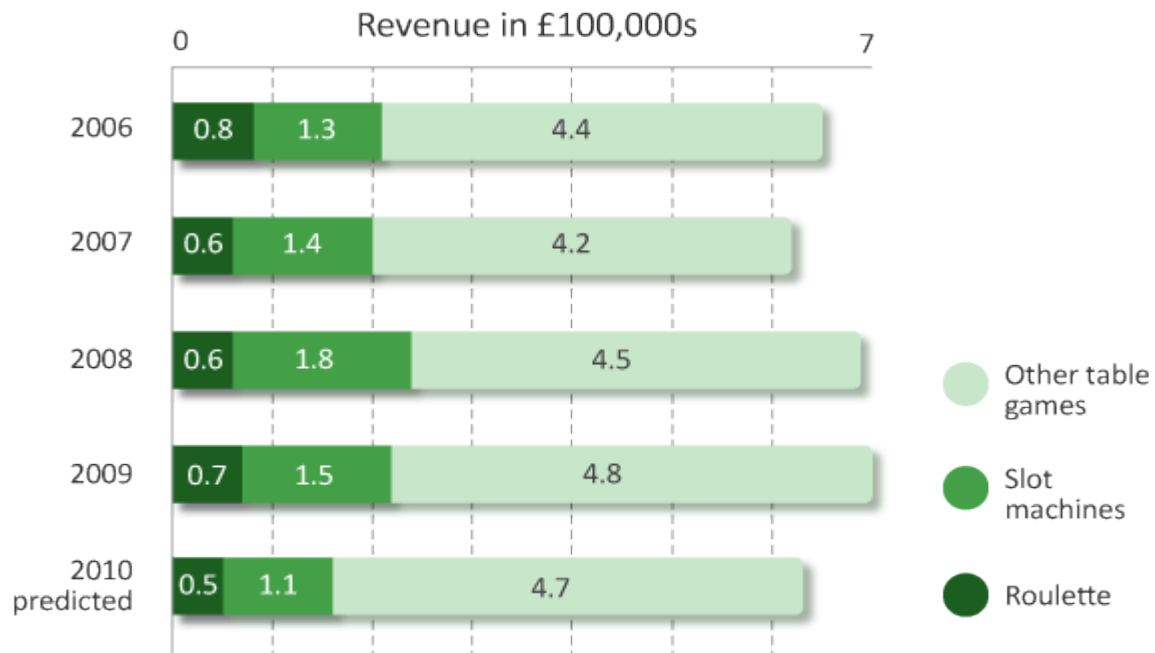


Year	Annual Attendance (100,000s)
2006	14.6
2007	15.2
2008	16.3
2009	16.8
2010 Predicted	16.5

Q4 What will be the average annual change in attendance at Calewall casino across the years 2006-2010 if the 2010 prediction proves to be accurate?

- (A) 47,500 decrease
- (B) 53,500 decrease
- (C) 52,500 increase
- (D) 47,500 increase
- (E) 53,500 increase

Calewell Casino Revenue

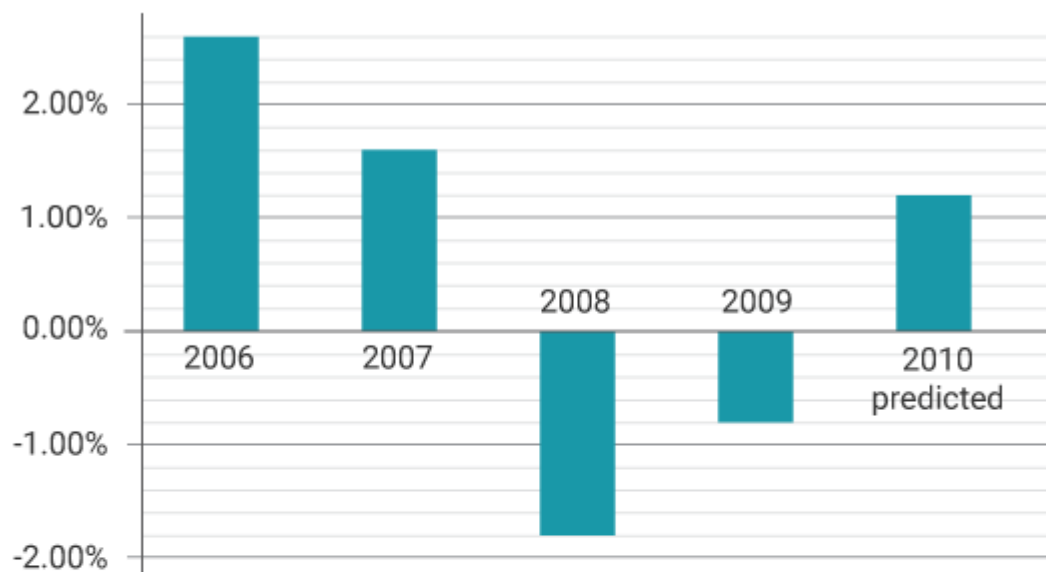


Year	Annual Attendance (100,000s)
2006	14.6
2007	15.2
2008	16.3
2009	16.8
2010 Predicted	16.5

Q5 Calewall casino is subject to a takeover bid of 7 times its 2010 projected casino revenues. The Board responds that it can deliver 10% added value through cost-cuttings to this purchase price. What valuation is the Board putting on Calewall casino (in £ millions)?

- (A) £48.51 million
- (B) £44.1 million
- (C) £4.85 million
- (D) £4.41 million
- (E) £6.3 million

Change in R&D spend compared with previous years



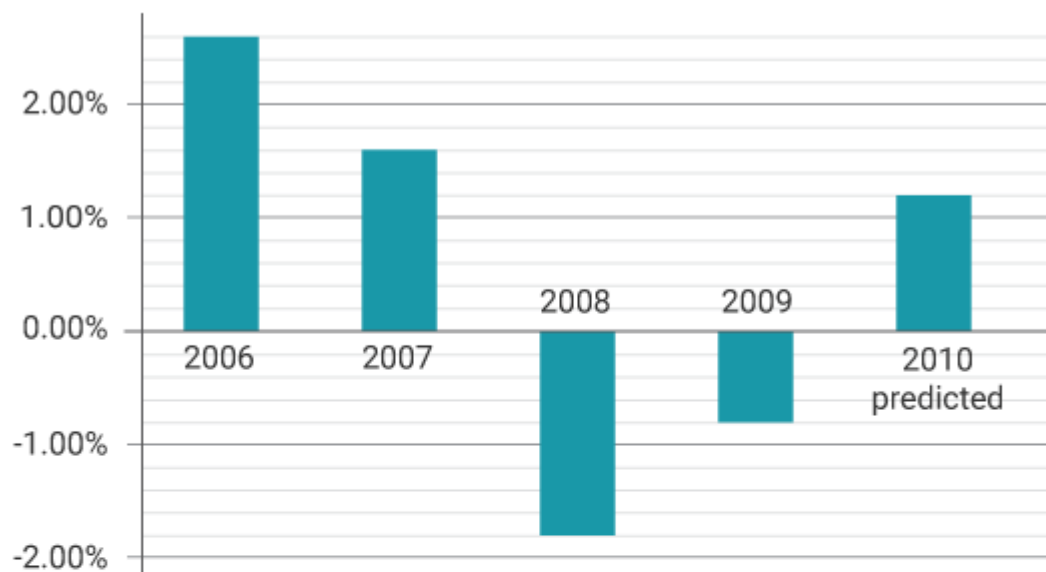
Teala Media R&D Projects 2009

R&D Projects	R&D spend (£1000s)
Leadership development programme	425.9
Process improvement systems	672.8
Partnership with A.S.P. systems	215.5
New product development	1,056.0
Spry Inc. joint venture	113.2

Q6 If the 2010 prediction proves to be accurate, what is the average annual percentage change in Teala Media's R&D spend across the 5 years shown?

- (A) 0.53
- (B) 0.54
- (C) 0.55
- (D) 0.56
- (E) 0.57

Change in R&D spend compared with previous years



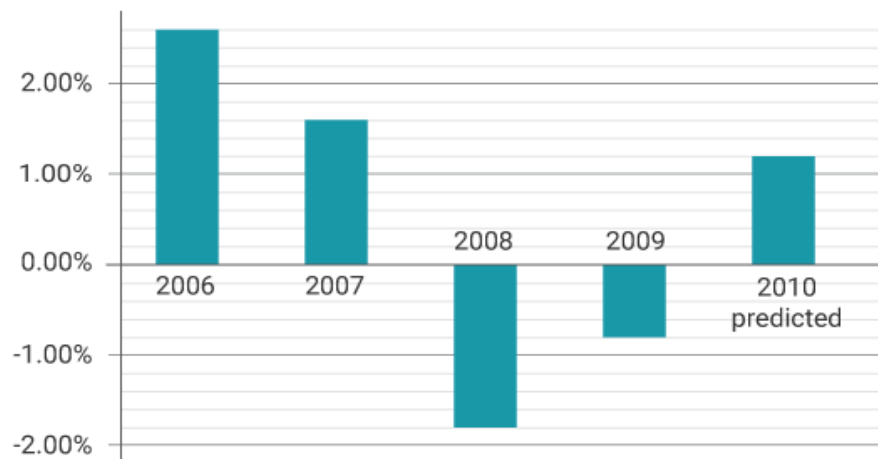
Teala Media R&D Projects 2009

R&D Projects	R&D spend (£1000s)
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Process improvement systems	672.8
Partnership with A.S.P. systems	215.5
New product development	1,056.0
Spry Inc. joint venture	113.2

Q7 What is the R&D spend projected to be for 2010?

- (A) £2.5 million
- (B) £2.75 million
- (C) £3.0 million
- (D) £3.25 million
- (E) £3.5 million

Change in R&D spend compared with previous years



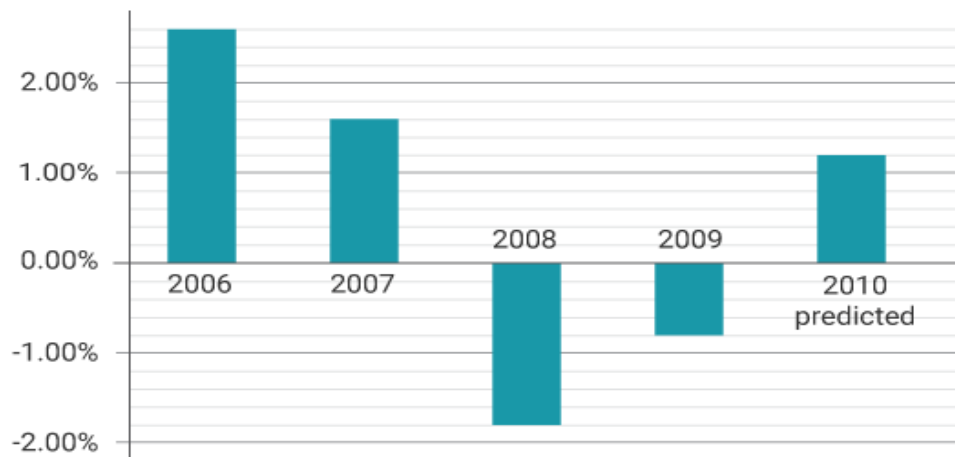
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Spry Inc. joint venture	113.2

Q8 What was the R&D spend for 2008 (to the nearest £1,000)?

- (A) £2,235,000
- (B) £2,613,000
- (C) £2,503,000
- (D) £2,483,000
- (E) £2,305,000

Change in R&D spend compared with previous years



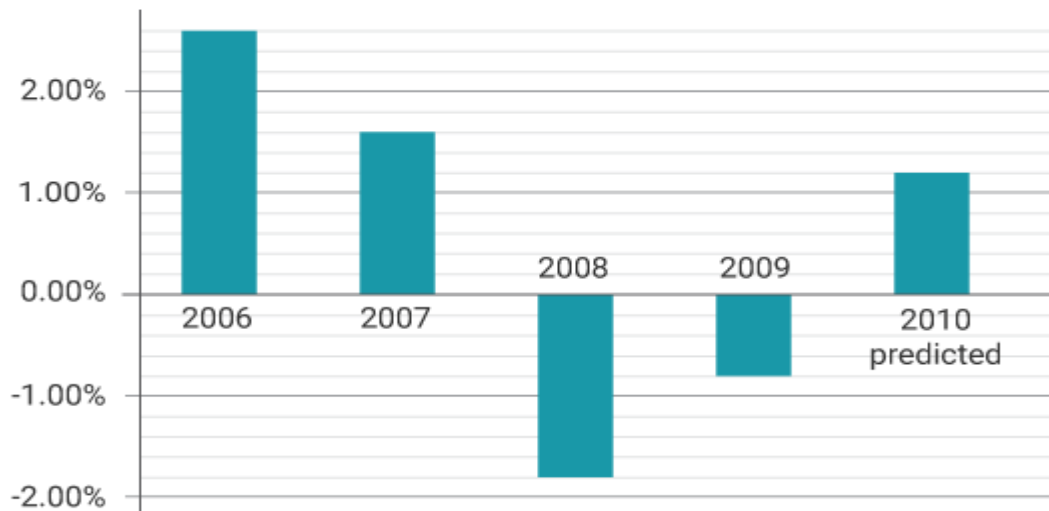
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R&D Projects	R&D spend (£1000s)
Leadership development programme	425.9
Process improvement systems	672.8
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New product development	1,056.0
Spry Inc. joint venture	113.2

Q9 R&D overheads were 12% of R&D spend in 2009. If R&D overheads are projected to rise by 1.1% between 2009 and 2010, what is the 2010 predicted R&D sum left after these overheads are taken in to account?

- (A) £1.02million
- (B) £1.22million
- (C) £2.11million
- (D) £2.21million
- (E) £2.48million

Change in R&D spend compared with previous years



Teala Media R&D Projects 2009

R&D Projects	R&D spend (£1000s)
Leadership development programme	425.9
Process improvement systems	672.8
Partnership with A.S.P. systems	215.5
New product development	1,056.0
Spry Inc. joint venture	113.2

Q10 If delays at the end of 2009 resulted in a 2.5% increase in the cost of each of the two most expensive projects, what is the total R&D spend for 2009 (to the nearest £1,000)?

- (A) £2,482,000
- (B) £2,527,000
- (C) £2,528,000
- (D) £2,556,000
- (E) None of These



Number of shares held

Directors	At 1 st April 2009	At 30 th April 2009	At 31 st May 2009
Geoffrey Yates	1,100	1,050	910
Tobey Gilham	1,050	950	820
Susan Preddy	950	820	250
Samantha Hoxton	990	1,100	550
Trudy Stupples	1,200	960	2,400

Q11 What is the number of shares not held by Directors of Leutts (as of 30 April 2009)?

- (A) 25,620
- (B) 6,850
- (C) 43,500
- (D) 4,880
- (E) Cannot tell from data

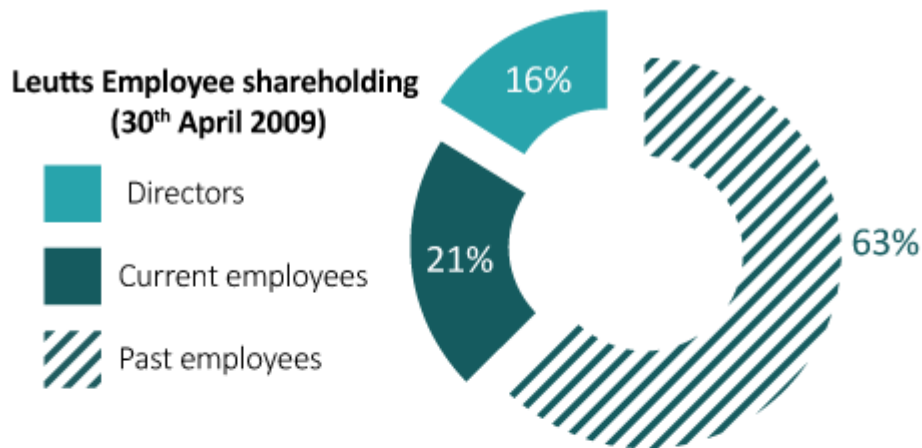


Number of shares held

Directors	At 1 st April 2009	At 30 th April 2009	At 31 st May 2009
Geoffrey Yates	1,100	1,050	910
Tobey Gilham	1,050	950	820
Susan Preddy	950	820	250
Samantha Hoxton	990	1,100	550
Trudy Stupples	1,200	960	2,400

Q12 Which Director has bought or sold the largest number of shares across the 2-month period shown?

- (A) Geoffrey Yates
- (B) Trudy Stupples
- (C) Samantha Hoxton
- (D) Susan Preddy
- (E) Tobey Gilham

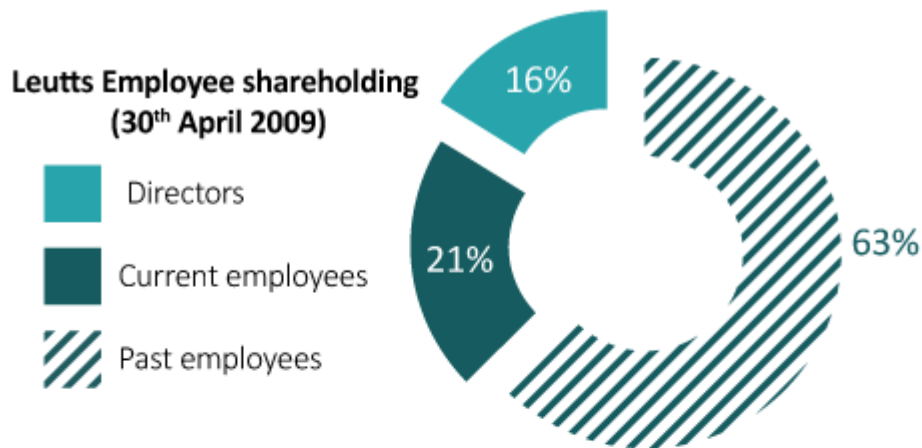


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Susan Preddy	950	820	250
Samantha Hoxton	990	1,100	550
Trudy Stupples	1,200	960	2,400

Q13 If Tobey Gilham sells half of his shareholding at 31 May 2009 at £45 per share, how much is this trade worth?

- (A) £3,690
- (B) £18,250
- (C) £18,450
- (D) £9,230
- (E) £36,900

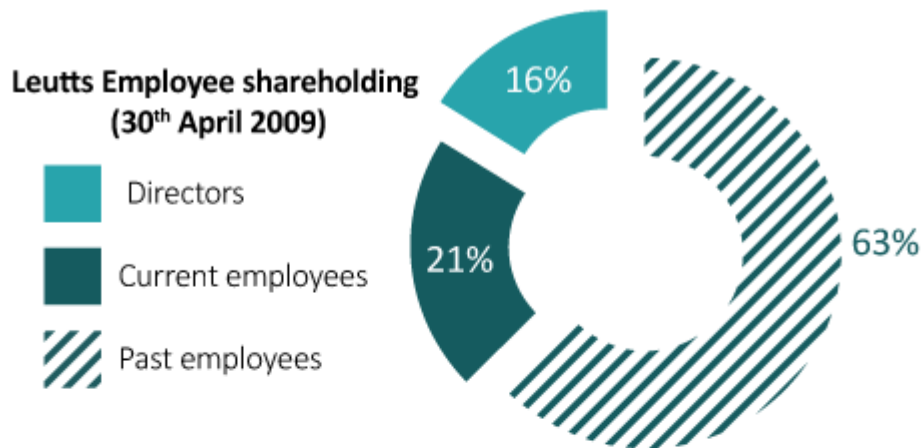


Number of shares held

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Geoffrey Yates	1,100	1,050	910
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Susan Preddy	950	820	250
Samantha Hoxton	990	1,100	550
Trudy Stupples	1,200	960	2,400

Q14 Which of the following statements is true?

- (A) Current employees and Directors owned 40% of Leutts shares on 30 April 2009
- (B) The largest Director share dealing was 1,440 shares
- (C) Directors held 4,870 shares in total on 30 April 2009
- (D) Tobey Gilham held the most shares of any Director on 1st April 2009
- (E) Each Director has less shares on 31 May 2009 compared to 1st April 2009



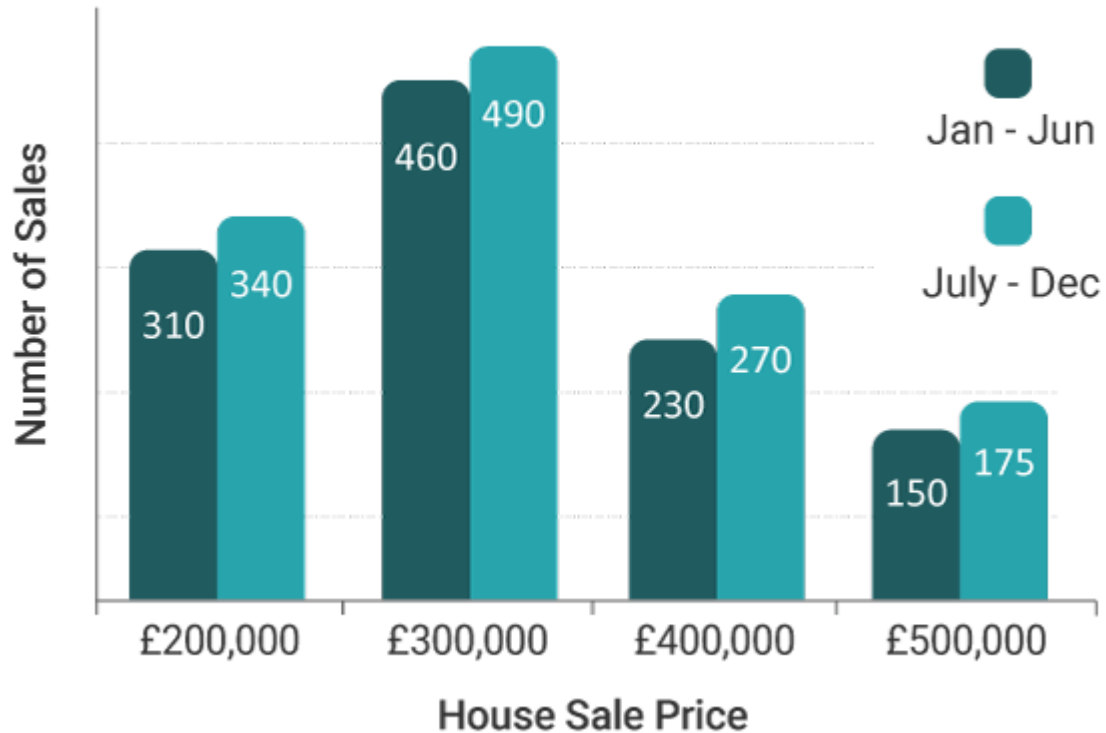
Number of shares held

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Tobey Gilham	1,050	950	820
Susan Preddy	950	820	250
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Trudy Stupples	1,200	960	2,400

Q15 If Leutts shares are worth £52 on 30 April 2009, then what is the share valuation of the entire company?

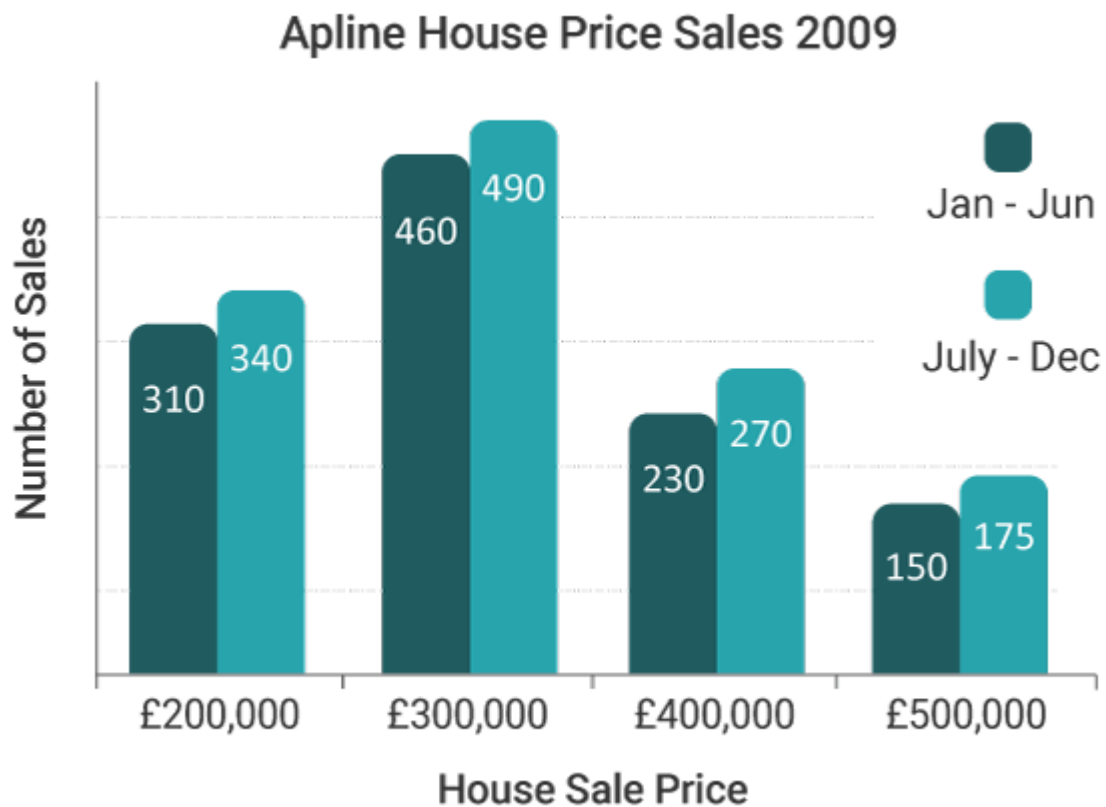
- (A) £1,686,000
- (B) £1,588,000
- (C) £1,566,000
- (D) £1,586,000
- (E) £1,856,000

Apline House Price Sales 2009



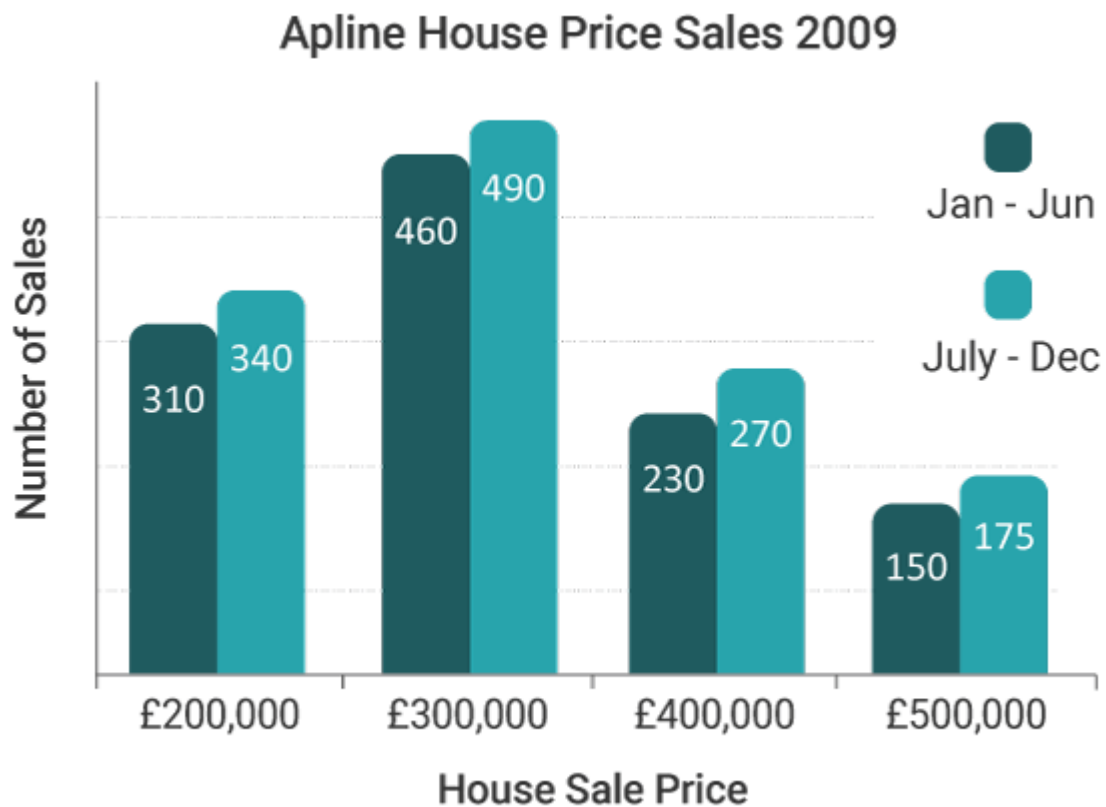
Q16 The total number of £400,000 Apline houses sold in 2009 represented 80% of the annual sales target. If this target was split equally across 5 salerooms, what was the individual sales target for each salesroom?

- (A) 155
- (B) 120
- (C) 125
- (D) 325
- (E) 225



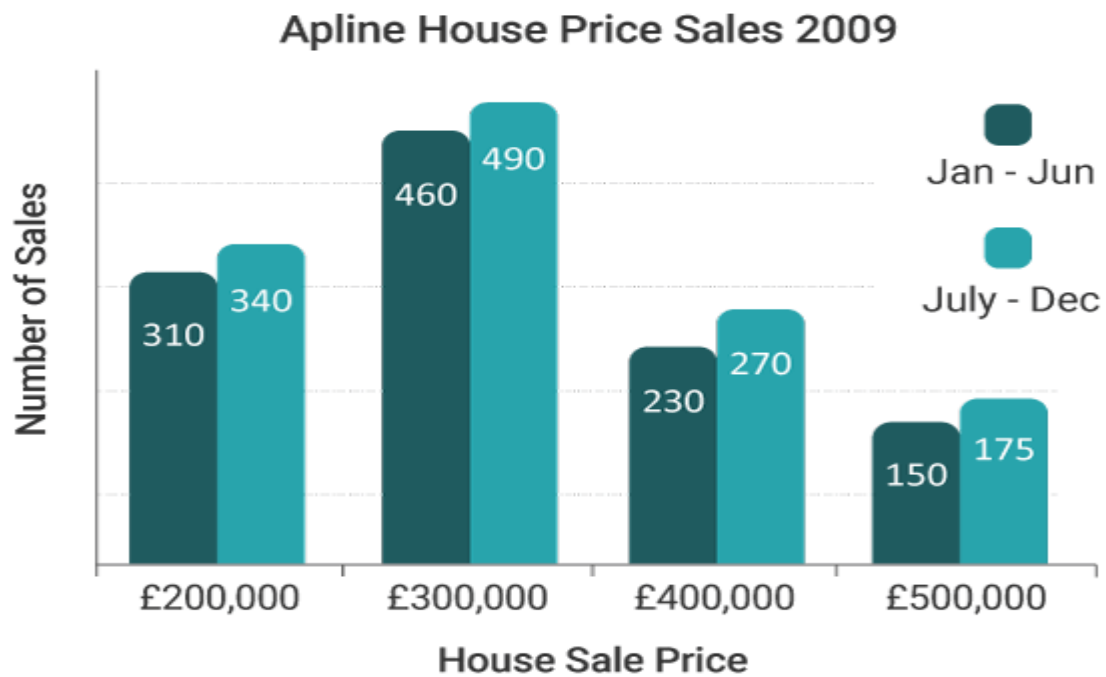
Q17 Stamp duty of 3% is paid on house sales over £250,000. How much stamp duty is paid by purchasers of Apline houses in 2009?

- (A) £16,425,000
- (B) £18,550,000
- (C) £19,425,000
- (D) £6,000,000
- (E) £8,550,000



Q18 What is the total value of 2009 Apline house sales?

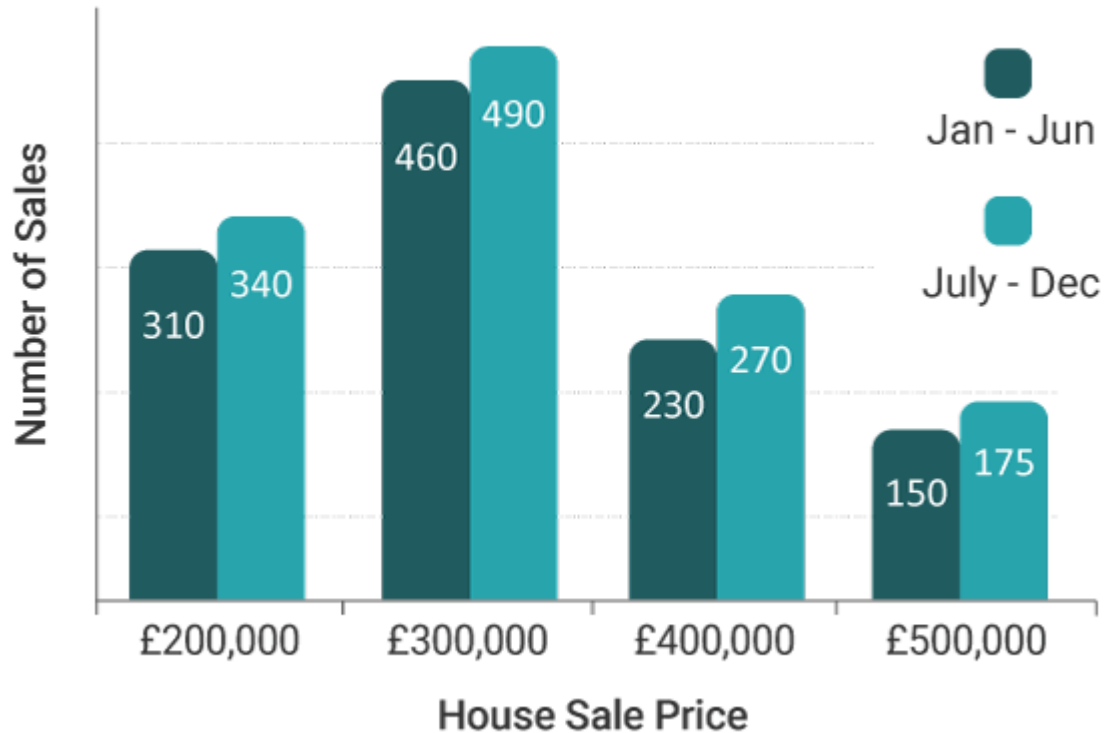
- (A) £127.5 million
- (B) £777.5 million
- (C) £115 million
- (D) £162.5 million
- (E) £353,409 million



Q19 In 2010, Apline house sales between Jan-June remain the same as those in 2009, while the sales for the July-Dec period increase by a fifth. What is the difference in Apline house sales between July-Dec 2010 and Jan-June for 2010 (in £million)?

- (A) 43.5
- (B) 52.2
- (C) 100
- (D) 125
- (E) 125.6

Apline House Price Sales 2009



Q20 A marketing drive is to be used to increase the value of Jan-June house sales to the value of July-December house sales. If each £ spent on marketing results in £3 of increased sales, what value must be spent on marketing?

- (A) £156.6 million
- (B) £75.4 million
- (C) £52.2 million
- (D) £36.6 million
- (E) £14.5 million

Total Sales (£millions)

Region	Previous Year	Current Year
Northern	310	310
Southern	170	160
Eastern	290	300
Western	255	280
Central	110	90

Region	Next Year's Projections
Northern	320
Southern	165
Eastern	275
Western	270
Central	125

Q21 If the sales projections for next year prove accurate, which region will have maintained or increased sales levels each year from the previous year to next year?

- (A) Northern region
- (B) Southern region
- (C) Eastern region
- (D) Western region
- (E) Central region

Total Sales (£millions)

Region	Previous Year	Current Year
Northern	310	310
Southern	170	160
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Western	255	280
Central	110	90

Region	Next Year's Projections
Northern	320
Southern	165
Eastern	275
Western	270
Central	125

Q22 What is the absolute difference between the lowest and the highest performing region (to the nearest £million) in the current year?

- (A) £216 million
- (B) £217 million
- (C) £218 million
- (D) £219 million
- (E) £220 million

Total Sales (£millions)

Region	Previous Year	Current Year
Northern	310	310
Southern	170	160
Eastern	290	300
Western	255	280
Central	110	90

Region	Next Year's Projections
Northern	320
Southern	165
Eastern	275
Western	270
Central	125

Q23 If next year's forecasts are scaled back by a quarter for the Northern and Western region, and by a fifth for the Southern and Eastern regions, what will be the total projected sales for all 5 regions?

- (A) £1,155 million
- (B) £924 million
- (C) £919.50 million
- (D) £942 million
- (E) £866.25 million

Total Sales (£millions)

Region	Previous Year	Current Year
Northern	310	310
Southern	170	160
Eastern	290	300
Western	255	280
Central	110	90

Region	Next Year's Projections
Northern	320
Southern	165
Eastern	275
Western	270
Central	125

Q24 What were the ratios for the Central: Eastern regional sales for the Previous Year compared to the Current Year?

- (A) 9:30 (Previous Year); 3:11 (Current Year)
- (B) 20:50 (Previous Year); 3:11 (Current Year)
- (C) 10:30 (Previous Year); 5:11 (Current Year)
- (D) 11:29 (Previous Year); 3:10 (Current Year)
- (E) 5:11 (Previous Year); 11:29 (Current Year)

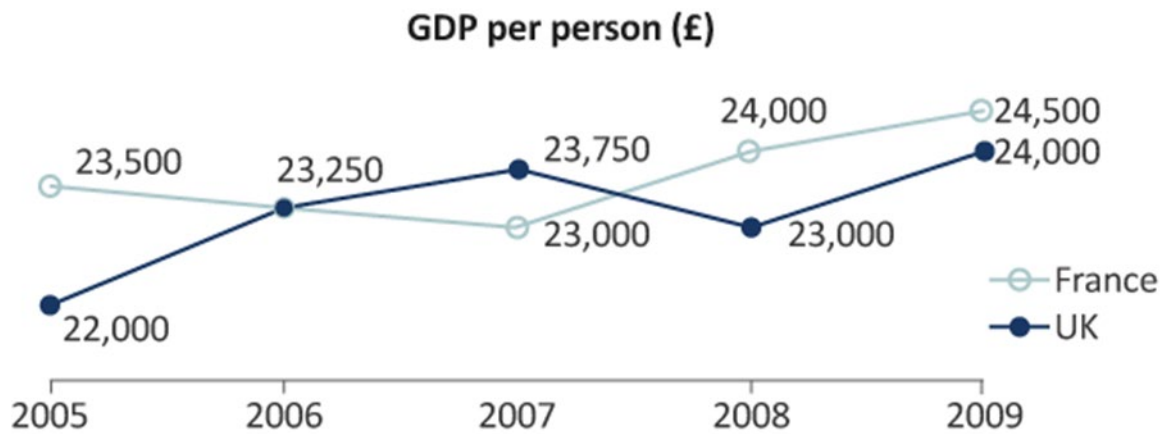
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Southern	165
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Western	270
Central	125

Q25 Put the regions in increasing order of total combined sales for the current year and next year's projection

- (A) Central, Southern, Western, Eastern, Northern
- (B) Southern, Central, Western, Eastern, Northern
- (C) Central, Western, Southern, Eastern, Northern
- (D) Central, Southern, Western, Northern, Eastern
- (E) Central, Southern, Northern, Western, Eastern

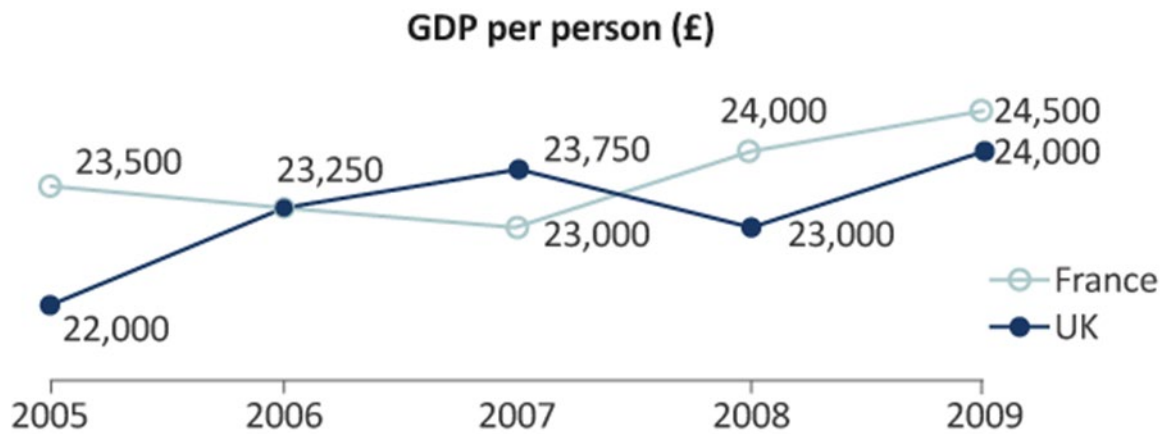


European Countries GDP (2009)

Country	Gross Domestic Product (GDP) (£billions)	GDP Per Person (£1000s)
France	2.4	24.5
Germany	3.1	25.7
Italy	1.95	23.6
Spain	1.4	20.5
UK	2.05	24

Q26 In which year (or years) was there more than a 3.3% difference in the GDP per person for France compared to the UK?

- (A) 2005, 2007
- (B) 2006, 2008
- (C) 2007, 2008
- (D) 2008, 2005
- (E) 2009, 2005

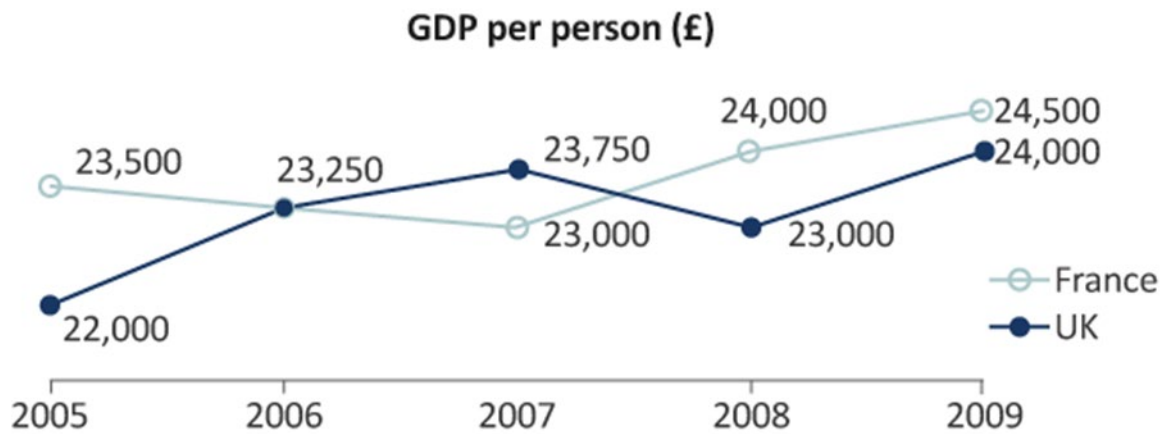


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France	2.4	24.5
Germany	3.1	25.7
Italy	1.95	23.6
Spain	1.4	20.5
UK	2.05	24

Q27 Which of the following statements is false?

- (A) Germany has the highest GDP of the countries shown.
- (B) Germany's GDP is over 20% higher than the France's GDP in 2009.
- (C) The 2005-2009 range of UK GDP per person is £23,500-£24,500.
- (D) The average GDP per country for the 5 countries shown is £2.18 billion.
- (E) The lowest and highest GDP per person are £20,500 and £25,700 respectively.

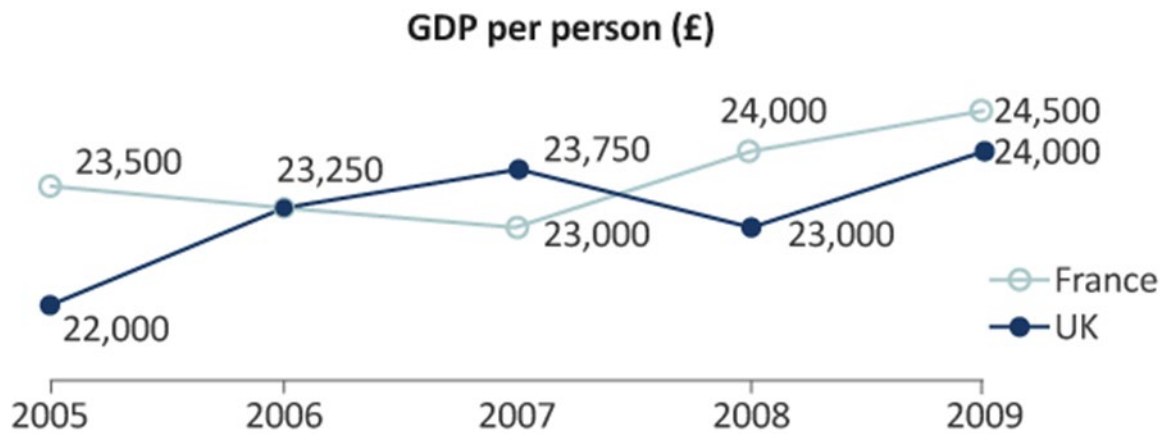


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Spain	1.4	20.5
UK	2.05	24

Q28 Which two countries had the smallest difference in GDP per person in 2009?

- (A) UK, Italy
- (B) France, Italy
- (C) Germany, Italy
- (D) Spain, Italy
- (E) Spain, France

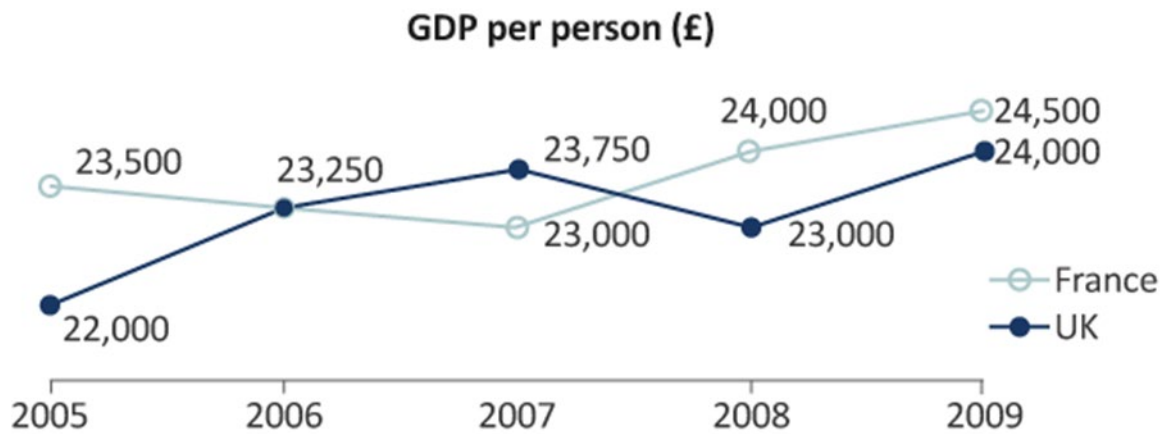


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Germany	3.1	25.7
Italy	1.95	23.6
Spain	1.4	20.5
UK	2.05	24

Q29 Of those shown, between which years were the GDPs per person increasing in both France and the UK?

- (A) 2008-2009
- (B) 2007-2008
- (C) 2006-2007
- (D) 2005-2006
- (E) Cannot tell from data



European Countries GDP (2009)

Country	Gross Domestic Product (GDP) (£billions)	GDP Per Person (£1000s)
France	2.4	24.5
Germany	3.1	25.7
Italy	1.95	23.6
Spain	1.4	20.5
UK	2.05	24

Q30 What was the average GDP per person for France and the UK across the 5 years shown?

- (A) £23,500 (France); £23,200 (UK)
- (B) £23,650 (France); £23,500 (UK)
- (C) £23,500 (France); £23,000 (UK)
- (D) £23,000 (France); £23,500 (UK)
- (E) £23,650 (France); £23,200 (UK)

End of test