

Numerical Reasoning

Test 5



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.

Total Product Sales by Demographic

	Units sold				Annual Target	Product Sales Target
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	(Unit sales)	(Euros)
Greece	26000	30000	31300	21000	110000	250000
Portugal	28000	33200	22600	20400	105000	240000
Austria	20000	28300	22500	35000	105000	240000
Ireland	19900	25000	27200	30300	105000	260000
Croatia	21500	29400	25800	28500	110000	230000

Q1 What was the unit sales ratio of Austrian Quarter 4 : Portugal Quarter 1: Greek Quarter 4?

- (A) 35:28:22
- (B) 5:3:4
- (C) 6:4:3
- (D) 5:4:3
- (E) 3:4:2

Total Product Sales by Demographic

	Units sold				Annual Target	Product Sales Target
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	(Unit sales)	(Euros)
Greece	26000	30000	31300	21000	110000	250000
Portugal	28000	33200	22600	20400	105000	240000
Austria	20000	28300	22500	35000	105000	240000
Ireland	19900	25000	27200	30300	105000	260000
Croatia	21500	29400	25800	28500	110000	230000

Q2 Which country met or exceeded its annual target for unit sales?

- (A) Greece
- (B) Portugal
- (C) Austria
- (D) Ireland
- (E) Croatia

Total Product Sales by Demographic

	Units sold				Annual Target	Product Sales Target
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	(Unit sales)	(Euros)
Greece	26000	30000	31300	21000	110000	250000
Portugal	28000	33200	22600	20400	105000	240000
Austria	20000	28300	22500	35000	105000	240000
Ireland	19900	25000	27200	30300	105000	260000
Croatia	21500	29400	25800	28500	110000	230000

Q3 The previous year's average number of Portuguese units sold per quarter was 20% higher than the year shown. What was the previous year's average number of Portuguese units sold per quarter?

- (A) 104,200
- (B) 31,260
- (C) 26,050
- (D) 21,260
- (E) 20,840

Total Product Sales by Demographic

	Units sold				Annual Target	Product Sales Target
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	(Unit sales)	(Euros)
Greece	26000	30000	31300	21000	110000	250000
Portugal	28000	33200	22600	20400	105000	240000
Austria	20000	28300	22500	35000	105000	240000
Ireland	19900	25000	27200	30300	105000	260000
Croatia	21500	29400	25800	28500	110000	230000

Q4 If Austria's annual corporation tax was 22% on the first €200,000 of sales and 20% on sales exceeding €200,000, how much is their corporation tax bill for the year (assuming each unit is sold at €3.5)?

- (A) €34,000
- (B) €34,060
- (C) €37,060
- (D) €44,000
- (E) €78,060

Total Product Sales by Demographic

	Units sold				Annual Target	Product Sales Target
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	(Unit sales)	(Euros)
Greece	26000	30000	31300	21000	110000	250000
Portugal	28000	33200	22600	20400	105000	240000
Austria	20000	28300	22500	35000	105000	240000
Ireland	19900	25000	27200	30300	105000	260000
Croatia	21500	29400	25800	28500	110000	230000

Q5 Greek and Irish sales generated 2.5 Euros per unit sold, whilst the other countries' sales generated 2.25 Euros per unit sold. Which country or countries exceeded their Annual Product Sales Target?

- (A) Portugal and Austria
- (B) Ireland and Austria
- (C) Croatia and Austria
- (D) Croatia and Greece
- (E) Ireland and Greece

Share	Price today (£)	Price yesterday (£)
Share A	20.0	19.4
Share B	4.2	3.9
Share C	18.1	19.3
Share D	5.6	5.1
Share E	3.1	3.3
Exchange Rate	Today	Yesterday
\$	\$1.62 to the £	\$1.63 to the £
€	€1.23 to the £	€1.22 to the £

Q6 Which shares have increased and decreased respectively in value by the largest percent from yesterday to today?

- (A) Share D, Share A
- (B) Share D, Share C
- (C) Share D, Share E
- (D) Share B, Share A
- (E) Share B, Share C

Share	Price today (£)	Price yesterday (£)
Share A	20.0	19.4
Share B	4.2	3.9
Share C	18.1	19.3
Share D	5.6	5.1
Share E	3.1	3.3
Exchange Rate	Today	Yesterday
\$	\$1.62 to the £	\$1.63 to the £
€	€1.23 to the £	€1.22 to the £

Q7 A dealer buys 250 Share Ds and 350 Share Es at yesterday's prices and sells these at today's prices. How much profit or loss does the dealer make?

- (A) £125 profit
- (B) £70 profit
- (C) £55 profit
- (D) £125 loss
- (E) £70 loss

Share	Price today (£)	Price yesterday (£)
Share A	20.0	19.4
Share B	4.2	3.9
Share C	18.1	19.3
Share D	5.6	5.1
Share E	3.1	3.3
Exchange Rate	Today	Yesterday
\$	\$1.62 to the £	\$1.63 to the £
€	€1.23 to the £	€1.22 to the £

Q8 A trader has 200,000 Share Bs to sell at today's price and today plans to split her proceeds equally into an investment in Share A and Share D. In how many Share As and Share Ds does the trader invest?

- (A) 20,000 Share A and 70,000 Share D
- (B) 21,000 Share A and 75,000 Share D
- (C) 22,000 Share A and 80,000 Share D
- (D) 23,000 Share A and 85,000 Share D
- (E) 24,000 Share A and 90,000 Share D

Share	Price today (£)	Price yesterday (£)
Share A	20.0	19.4
Share B	4.2	3.9
Share C	18.1	19.3
Share D	5.6	5.1
Share E	3.1	3.3
Exchange Rate	Today	Yesterday
\$	\$1.62 to the £	\$1.63 to the £
€	€1.23 to the £	€1.22 to the £

Q9 What was the total cost of buying 550 Share C's yesterday and 1,050 Share E's today (to the nearest \$1,000)?

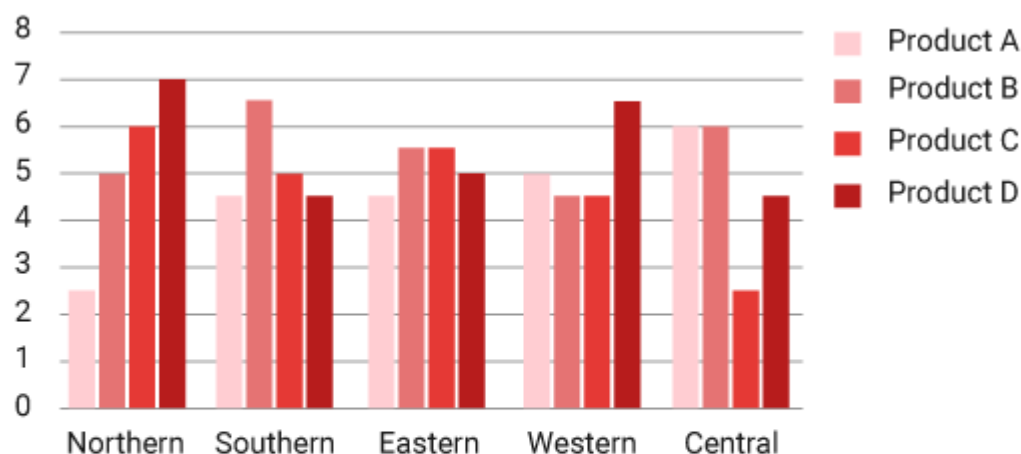
- (A) \$11,000
- (B) \$14,000
- (C) \$17,000
- (D) \$18,000
- (E) \$23,000

Share	Price today (£)	Price yesterday (£)
Share A	20.0	19.4
Share B	4.2	3.9
Share C	18.1	19.3
Share D	5.6	5.1
Share E	3.1	3.3
Exchange Rate	Today	Yesterday
\$	\$1.62 to the £	\$1.63 to the £
€	€1.23 to the £	€1.22 to the £

Q10 Today's prices for Share A and Share C (in Euros) respectively represent a 15% decrease and a 22% increase on the price (in Euros) one year ago. What were the respective prices a year ago (to the nearest Euro)?

- (A) €18 (Share A); €18 (Share C)
- (B) €22 (Share A); €22 (Share C)
- (C) €29 (Share A); €29 (Share C)
- (D) €29 (Share A); €18 (Share C)
- (E) €29 (Share A); €30 (Share C)

Year 2 Product Sales by UK region (£10,000s)



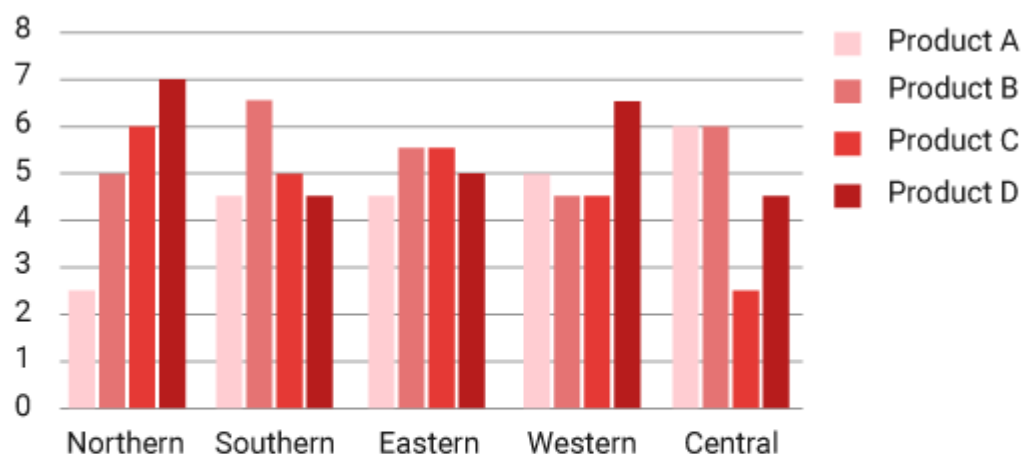
Year 1 and Year 3

% of total Sales	Northern	Southern	Eastern	Western	Central
Year 1	22	24	22	18	14
Year 3	24	20	24	16	16

Q11 Which two products had the same total product sales in Year 2?

- (A) Product A and Product B
- (B) Product A and Product C
- (C) Product A and Product D
- (D) Product B and Product C
- (E) Product B and Product D

Year 2 Product Sales by UK region (£10,000s)



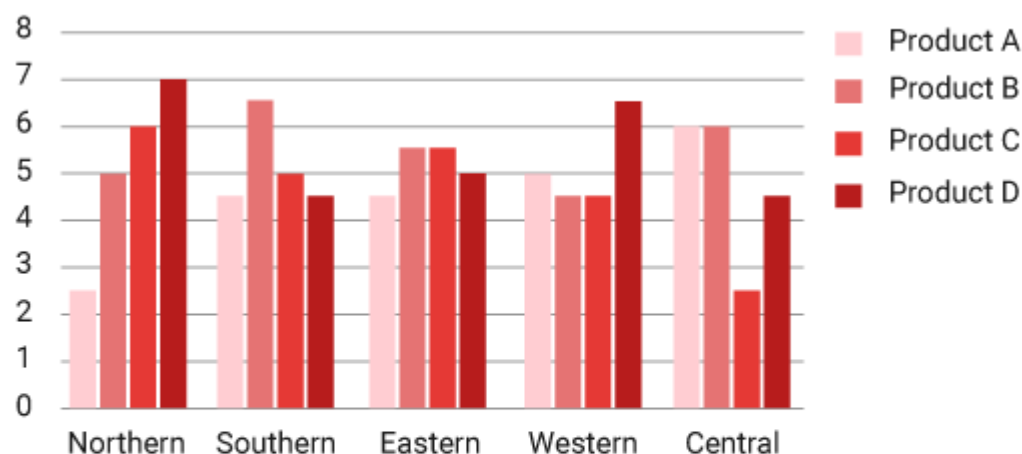
Year 1 and Year 3

% of total Sales	Northern	Southern	Eastern	Western	Central
Year 1	22	24	22	18	14
Year 3	24	20	24	16	16

Q12 As a percentage of total sales across all regions, how has the Eastern region's sales changed between Year 1 and Year 2?

- (A) 1% less
- (B) 1.7% more
- (C) 1.7% less
- (D) 3% more
- (E) 3% less

Year 2 Product Sales by UK region (£10,000s)



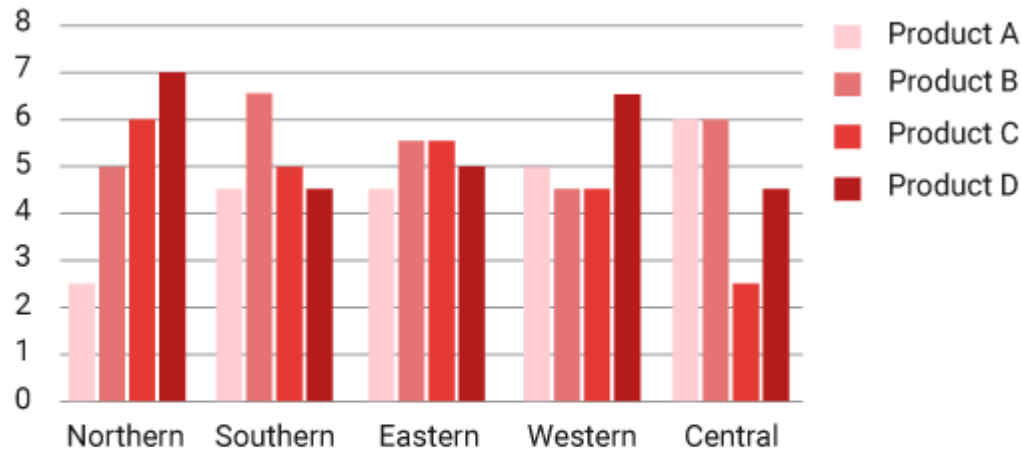
Year 1 and Year 3

% of total Sales	Northern	Southern	Eastern	Western	Central
Year 1	22	24	22	18	14
Year 3	24	20	24	16	16

Q13 For products A, B, C and D combined, which region had a sales value different from the other regions in Year 2?

- (A) Western
- (B) Eastern
- (C) Central
- (D) Northern
- (E) None of these

Year 2 Product Sales by UK region (£10,000s)



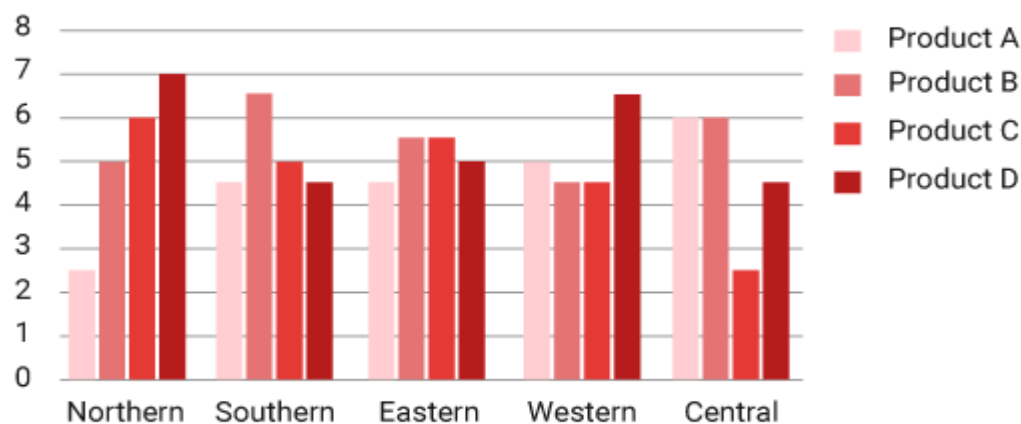
Year 1 and Year 3

% of total Sales	Northern	Southern	Eastern	Western	Central
Year 1	22	24	22	18	14
Year 3	24	20	24	16	16

Q14 The 5 regions shown represent UK product sales, which is one-quarter of the value of US product sales and 50% of the value of Asian product sales. What are Year 2's total product sales for all 3 territories combined?

- (A) £9,010,000
- (B) £7,070,000
- (C) £5,000,000
- (D) £3,030,000
- (E) £1,010,000

Year 2 Product Sales by UK region (£10,000s)



Year 1 and Year 3

% of total Sales	Northern	Southern	Eastern	Western	Central
Year 1	22	24	22	18	14
Year 3	24	20	24	16	16

Q15 Which region experienced the greatest change in its share of total UK sales between Year 1 and Year 2?

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

Total Liabilities	Previous Year (£million)	Current Year (£million)	Next Year's Projection (£million)
Current Liabilities			
Interest paying loans	135	126	134
Currency swaps	8.5	11.3	6.9
Other current liabilities	42	52	48.3
Non-Current Liabilities			
Interest bearing loans	53	45	42.6
Pension payments	204	196	218
Tax liabilities	48	56.4	49.5

Q16 Next year, which liability is projected to have experienced the second highest percentage change in value compared with last year?

- (A) Interest paying loans
- (B) Currency swaps
- (C) Other current liabilities
- (D) Pension payments
- (E) Cannot tell

Total Liabilities	Previous Year (£million)	Current Year (£million)	Next Year's Projection (£million)
Current Liabilities			
Interest paying loans	135	126	134
Currency swaps	8.5	11.3	6.9
Other current liabilities	42	52	48.3
Non-Current Liabilities			
Interest bearing loans	53	45	42.6
Pension payments	204	196	218
Tax liabilities	48	56.4	49.5

Q17 What is the average difference between the total Non-Current Liabilities and the total Current Liabilities for the 3 years shown (to the nearest £million)?

- (A) £116 million
- (B) £117 million
- (C) £118 million
- (D) £119 million
- (E) £120 million

Total Liabilities	Previous Year (£million)	Current Year (£million)	Next Year's Projection (£million)
Current Liabilities			
Interest paying loans	135	126	134
Currency swaps	8.5	11.3	6.9
Other current liabilities	42	52	48.3
Non-Current Liabilities			
Interest bearing loans	53	45	42.6
Pension payments	204	196	218
Tax liabilities	48	56.4	49.5

Q18 If the projected figures shown prove accurate and the same percentage changes occur for each liability in the year after next, what will the total Current Liabilities be in the year after next (to the nearest £million)?

- (A) £192 million
- (B) £189 million
- (C) £187 million
- (D) £185 million
- (E) £183 million

Total Liabilities	Previous Year (£million)	Current Year (£million)	Next Year's Projection (£million)
Current Liabilities			
Interest paying loans	135	126	134
Currency swaps	8.5	11.3	6.9
Other current liabilities	42	52	48.3
Non-Current Liabilities			
Interest bearing loans	53	45	42.6
Pension payments	204	196	218
Tax liabilities	48	56.4	49.5

Q19 The Pension payments figure for each year is based upon the following numbers of ex-employees drawing a pension: 8,155 (previous year); 8,240 (current year); 8,325 (next year). What is the average pension payable across the 3 years shown (to the nearest £1,000)?

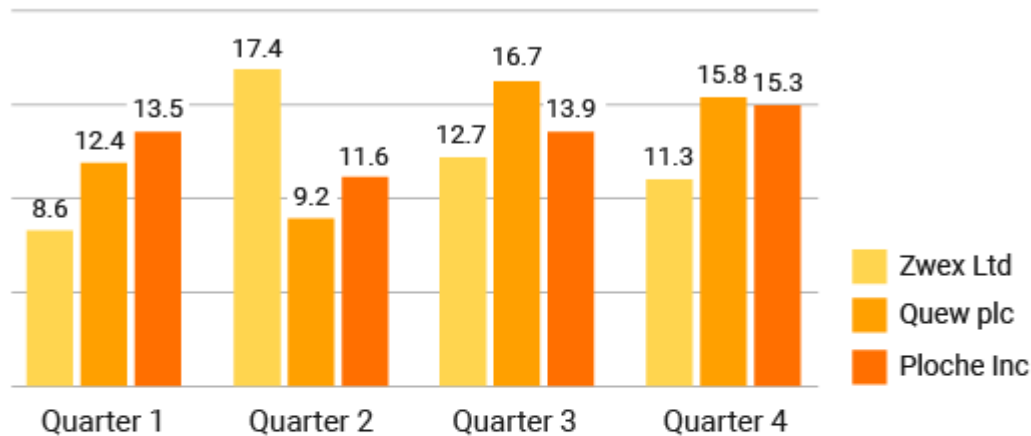
- (A) £15,000
- (B) £20,000
- (C) £25,000
- (D) £30,000
- (E) £35,000

Total Liabilities	Previous Year (£million)	Current Year (£million)	Next Year's Projection (£million)
Current Liabilities			
Interest paying loans	135	126	134
Currency swaps	8.5	11.3	6.9
Other current liabilities	42	52	48.3
Non-Current Liabilities			
Interest bearing loans	53	45	42.6
Pension payments	204	196	218
Tax liabilities	48	56.4	49.5

Q20 Next year's projected figures need to be corrected by adding an additional 4% for inflation. What is next year's corrected total Non-Current Liabilities?

- (A) £322.5 million
- (B) £310.1 million
- (C) £309.3 million
- (D) £297.7 million
- (E) £297.4 million

2006 Global Income (£100,000s)



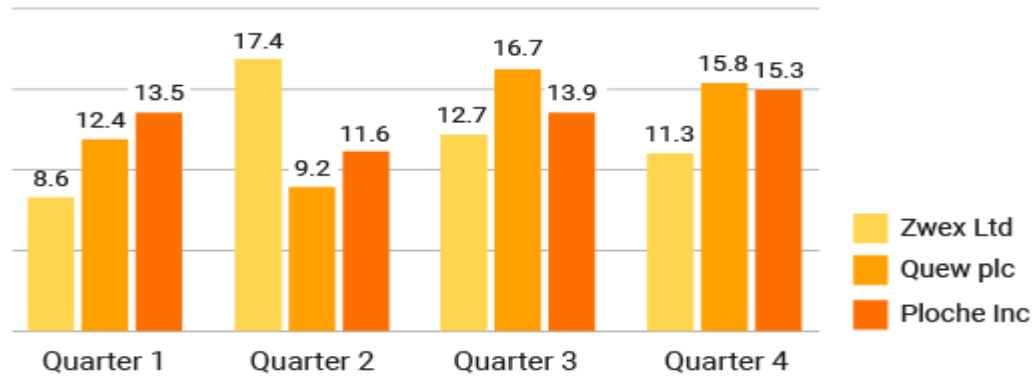
Global income (% annual change on year before)

	2007	2008	2009	2010	2011 (projection)
Zwex Ltd	2.3	0.6	2.2	1.8	2.1
Qew plc	-0.7	-0.8	0.3	1.1	1.4
Ploche Inc	1.4	1.2	1.6	0.5	2.9

Q21 What was the global income for Ploche Inc in 2007 (to the nearest £10,000)?

- (A) £6,000,000
- (B) £5,510,000
- (C) £5,500,000
- (D) £5,430,000
- (E) £4,510,000

2006 Global Income (£100,000s)



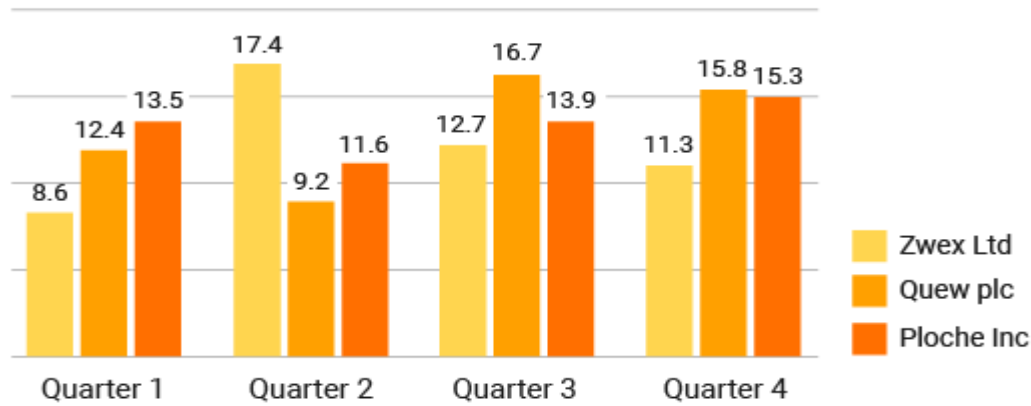
Global income (% annual change on year before)

	2007	2008	2009	2010	2011 (projection)
Zwex Ltd	2.3	0.6	2.2	1.8	2.1
Quew plc	-0.7	-0.8	0.3	1.1	1.4
Ploche Inc	1.4	1.2	1.6	0.5	2.9

Q22 Which of the following statements is true?

- (A) Ploche Inc increased global income each quarter during 2006
- (B) Between 2007-2010 Zwex Ltd has experienced 6.9% global income growth
- (C) In 2006 Quew plc's global income was £5,430,000
- (D) Ploche Inc has experienced positive global growth each year between 2006-2010
- (E) The average 2006 Quarter 2 sales were £1.15 million

2006 Global Income (£100,000s)



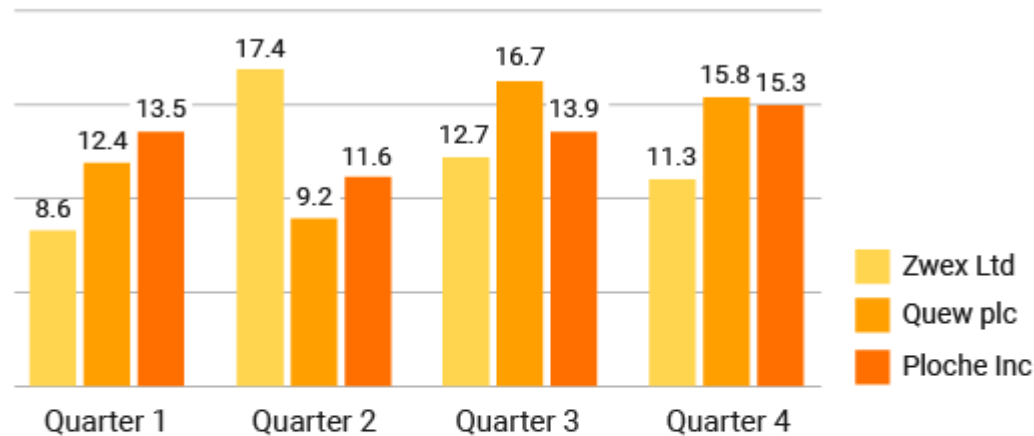
Global income (% annual change on year before)

	2007	2008	2009	2010	2011 (projection)
Zwex Ltd	2.3	0.6	2.2	1.8	2.1
Quew plc	-0.7	-0.8	0.3	1.1	1.4
Ploche Inc	1.4	1.2	1.6	0.5	2.9

Q23 In which year up to 2010 did Quew plc experience a higher annual % growth than either Zwex Ltd or Ploche Inc?

- (A) 2007
- (B) 2008
- (C) 2009
- (D) 2010
- (E) None of these

2006 Global Income (£100,000s)



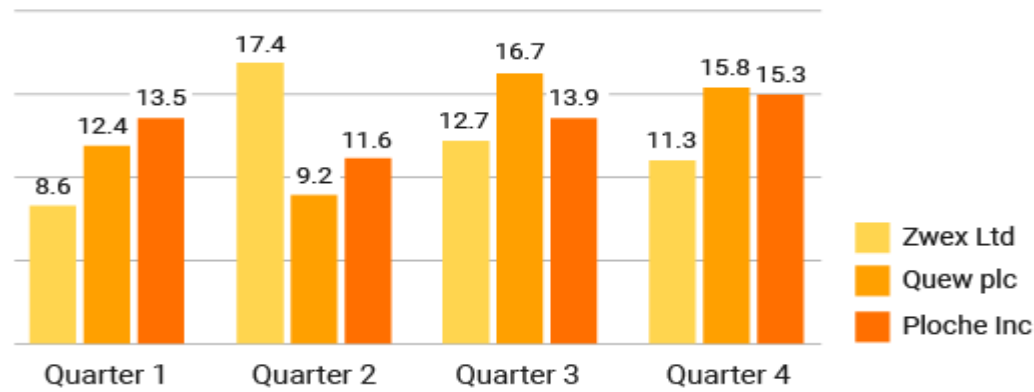
Global income (% annual change on year before)

	2007	2008	2009	2010	2011 (projection)
Zwex Ltd	2.3	0.6	2.2	1.8	2.1
Qew plc	-0.7	-0.8	0.3	1.1	1.4
Ploche Inc	1.4	1.2	1.6	0.5	2.9

Q24 In 2006 Zwex's Global sales comprised European and non-European sales, which were in the ratio 3:4. What were Zwex's European sales for 2006?

- (A) £2.14 million
- (B) £2.5 million
- (C) £3 million
- (D) £3.5 million
- (E) £3.75 million

2006 Global Income (£100,000s)



Global income (% annual change on year before)

	2007	2008	2009	2010	2011 (projection)
Zwex Ltd	2.3	0.6	2.2	1.8	2.1
Qew plc	-0.7	-0.8	0.3	1.1	1.4
Ploche Inc	1.4	1.2	1.6	0.5	2.9

Q25 What was the global income for Qew plc in 2008 (to the nearest £100,000)?

- (A) £5.41 million
- (B) £5.37 million
- (C) £5.33 million
- (D) £5.30 million
- (E) £5.23 million

	2006	2007	2008	2009	2010
	<i>(£million)</i>	<i>(£million)</i>	<i>(£million)</i>	<i>(£million)</i>	<i>(£million)</i>
Adjusted earnings	1.02	1.05	0.95	0.98	1.11
Cash flow	1.32	1.42	1.34	1.25	1.53
Attributable profit	1.95	2.11	1.93	1.88	2.23
Average profit (per 500 units)	£250	£325	£175	£200	£300
Average sales price (per unit)	£4.50	£4.65	£4.30	£4.15	£4.60

Q26 From 2006 to 2007 Attributable profit increased at double the percentage rate as it did between 2005-2006. What was the Attributable profit figure for 2005?

- (A) £0.23 million
- (B) £1.03 million
- (C) £1.83 million
- (D) £1.87 million
- (E) £2.03 million

	2006	2007	2008	2009	2010
	<i>(£million)</i>	<i>(£million)</i>	<i>(£million)</i>	<i>(£million)</i>	<i>(£million)</i>
Adjusted earnings	1.02	1.05	0.95	0.98	1.11
Cash flow	1.32	1.42	1.34	1.25	1.53
Attributable profit	1.95	2.11	1.93	1.88	2.23
Average profit (per 500 units)	£250	£325	£175	£200	£300
Average sales price (per unit)	£4.50	£4.65	£4.30	£4.15	£4.60

Q27 If the target was to have an average profit (per unit) in excess of 50p, in which year or years was this achieved?

- (A) 2006
- (B) 2006 and 2007
- (C) 2010
- (D) 2007 and 2010
- (E) 2006, 2007 and 2010

	2006	2007	2008	2009	2010
	<i>(£million)</i>	<i>(£million)</i>	<i>(£million)</i>	<i>(£million)</i>	<i>(£million)</i>
Adjusted earnings	1.02	1.05	0.95	0.98	1.11
Cash flow	1.32	1.42	1.34	1.25	1.53
Attributable profit	1.95	2.11	1.93	1.88	2.23
Average profit (per 500 units)	£250	£325	£175	£200	£300
Average sales price (per unit)	£4.50	£4.65	£4.30	£4.15	£4.60

Q28 In 2011, if Adjusted earnings increase by an eighth and there is a 2:3 ratio of (2011 Adjusted earnings: 2011 Cash flow), what will be the Cash flow in 2011?

- (A) £2.14 million
- (B) £1.87 million
- (C) £1.25 million
- (D) £0.83 million
- (E) £0.14 million

	2006	2007	2008	2009	2010
	<i>(£million)</i>	<i>(£million)</i>	<i>(£million)</i>	<i>(£million)</i>	<i>(£million)</i>
Adjusted earnings	1.02	1.05	0.95	0.98	1.11
Cash flow	1.32	1.42	1.34	1.25	1.53
Attributable profit	1.95	2.11	1.93	1.88	2.23
Average profit (per 500 units)	£250	£325	£175	£200	£300
Average sales price (per unit)	£4.50	£4.65	£4.30	£4.15	£4.60

Q29 Which year had the lowest ratio of Adjusted earnings to Attributable profit?

- (A) 2006
- (B) 2007
- (C) 2008
- (D) 2009
- (E) 2010

	2006	2007	2008	2009	2010
	<i>(£million)</i>	<i>(£million)</i>	<i>(£million)</i>	<i>(£million)</i>	<i>(£million)</i>
Adjusted earnings	1.02	1.05	0.95	0.98	1.11
Cash flow	1.32	1.42	1.34	1.25	1.53
Attributable profit	1.95	2.11	1.93	1.88	2.23
Average profit (per 500 units)	£250	£325	£175	£200	£300
Average sales price (per unit)	£4.50	£4.65	£4.30	£4.15	£4.60

Q30 Which year from 2007 onwards showed the greatest percentage change in Cash flow compared to the preceding year?

- (A) 2006
- (B) 2007
- (C) 2008
- (D) 2009
- (E) 2010

End of test