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Numerical Reasoning Practice Test 2

Many employers use psychometric testing in their recruitment process, with numerical reasoning tests often included.

The questions used in the following test are based on those available on the www.assessmentday.co.uk and www.graduatesfirst.com websites.

This test comprises 23 questions and you have 25 minutes to complete it.

The main numerical skills required for the test typically relate to percentages, ratios and reading/interpreting charts and graphs. Often the same data is used for several questions, so it is advisable get a clear grasp of the context before starting your calculations.

Calculators are allowed, so make sure that you are familiar with yours and are confident in using it.

The table below summarises the turnover (in £) at a Café over a 5 month period.

	January	February	March	April	May
Hot food	6,500	5,500	8,000	7,500	6,300
Cold food	2,000	2,500	3,000	3,200	3,500
Hot drink	9,000	8,000	8,400	7,500	6,900
Cold drink	3,000	4,800	4,900	5,000	6,200
Other	2,500	3,000	3,550	2,900	2,500

What was the average monthly turnover from hot drink?

- □ £7,960
- □ £7,060
- □ £8,400
- □ £7,950
- □ £4,780

The table below summarises the turnover (in £) at a Café over a 5 month period.

	January	February	March	April	May
Hot food	6,500	5,500	8,000	7,500	6,300
Cold food	2,000	2,500	3,000	3,200	3,500
Hot drink	9,000	8,000	8,400	7,500	6,900
Cold drink	3,000	4,800	4,900	5,000	6,200
Other	2,500	3,000	3,550	2,900	2,500

In which month was the turnover from drink greatest?
□ January
□ February
☐ March
□ April
□ May

The table below summarises the turnover (in £) at a Café over a 5 month period.

	January	February	March	April	May
Hot food	6,500	5,500	8,000	7,500	6,300
Cold food	2,000	2,500	3,000	3,200	3,500
Hot drink	9,000	8,000	8,400	7,500	6,900
Cold drink	3,000	4,800	4,900	5,000	6,200
Other	2,500	3,000	3,550	2,900	2,500

What is the percentage change in turnover for food between March and April?

- □ 6.67%
- □ 2.73%
- □ 2.80%
- □ -6.25%
- □ 6.25%

The table below summarises the turnover (in £) at a Café over a 5 month period.

	January	February	March	April	May
Hot food	6,500	5,500	8,000	7,500	6,300
Cold food	2,000	2,500	3,000	3,200	3,500
Hot drink	9,000	8,000	8,400	7,500	6,900
Cold drink	3,000	4,800	4,900	5,000	6,200
Other	2,500	3,000	3,550	2,900	2,500

For the period from January to March inclusive, what was the ratio of the turnover between hot drink and cold drink?

- □ 2: 1
- \square 3:1
- □ 5:3
- □ 8:3
- □ 12:7

The table below summarises the turnover (in £) at a Café over a 5 month period.

	January	February	March	April	May
Hot food	6,500	5,500	8,000	7,500	6,300
Cold food	2,000	2,500	3,000	3,200	3,500
Hot drink	9,000	8,000	8,400	7,500	6,900
Cold drink	3,000	4,800	4,900	5,000	6,200
Other	2,500	3,000	3,550	2,900	2,500

In February, if the hot food takings is increased by 20% and the cold food takings is decreased by 20%, what percentage change would this have on the total February turnover?

- □ 2.52%
- □ -2.46%
- □ 0%
- □ 2.46%
- □ 2.52%

The table below summarises the turnover (in £) at a Café over a 5 month period.

	January	February	March	April	May
Hot food	6,500	5,500	8,000	7,500	6,300
Cold food	2,000	2,500	3,000	3,200	3,500
Hot drink	9,000	8,000	8,400	7,500	6,900
Cold drink	3,000	4,800	4,900	5,000	6,200
Other	2,500	3,000	3,550	2,900	2,500

A forecast for June based on May predicts that turnover from hot food and hot drink will fall by 30% and that Other will remain unchanged. If the June turnover is to equal the May turnover, what percentage increase will be required in cold food and cold drink sales?

- □ 15%
- □ 19.5%
- □ 21.3%
- □ 30%
- □ 40.8%

The table below summarises the turnover (in £) at a Café over a 5 month period.

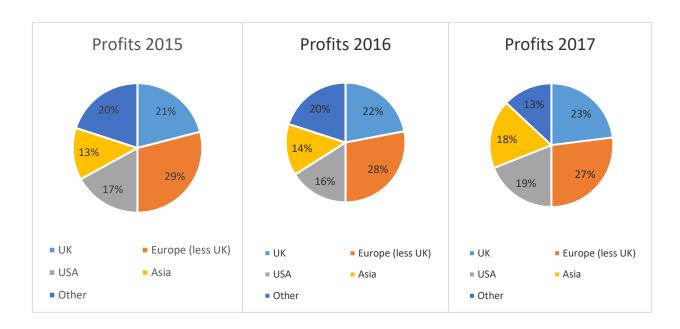
	January	February	March	April	May
Hot food	6,500	5,500	8,000	7,500	6,300
Cold food	2,000	2,500	3,000	3,200	3,500
Hot drink	9,000	8,000	8,400	7,500	6,900
Cold drink	3,000	4,800	4,900	5,000	6,200
Other	2,500	3,000	3,550	2,900	2,500

For Other, over the period January to April, which month showed the most significant percentage difference in size (hence could be positive or negative) compared with the previous month?

	January
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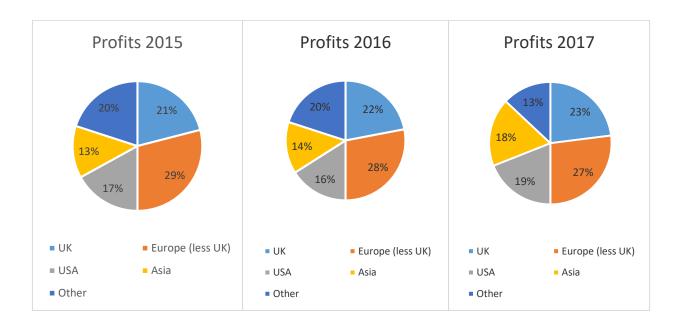
A company's annual profits from different parts of the world in 2015, 2016 and 2017 are £200m, £209m and £195m respectively.



What is the percentage increase in the UK profits between 2015 and 2017?

- □ 2%
- □ 6.8%
- □ 8.7%
- □ 9.5%
- □ 22%

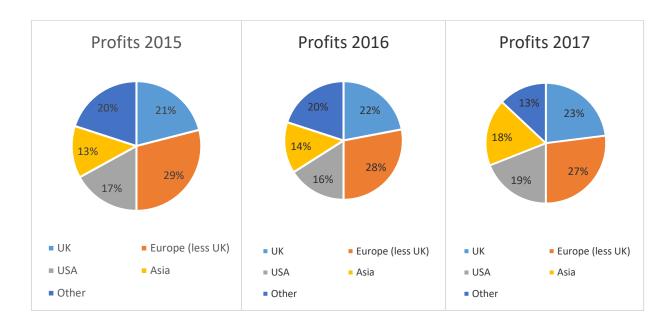
A company's annual profits from different parts of the world in 2015, 2016 and 2017 are £200m, £209m and £195m respectively.



For the period 2015-2017 inclusive, over how many years does the profit from Europe (less UK) exceed the profit from Australia?

- \square 0
- $\Box 1$
- \square 2
- $\square 3$
- ☐ Cannot tell

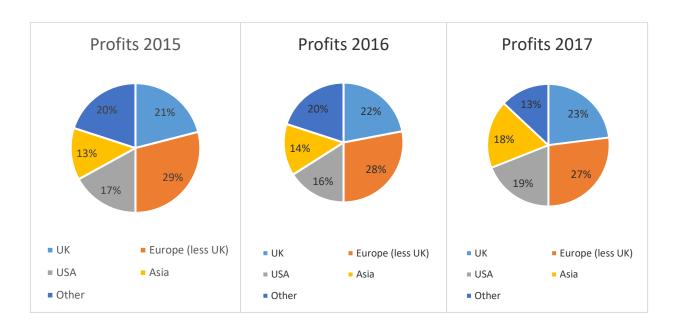
A company's annual profits from different parts of the world in 2015, 2016 and 2017 are £200m, £209m and £195m respectively.



In 2016 what percentage of the profits from the whole of Europe came from the UK?

- □ 22.0%
- \square 44.0%
- □ 72.4%
- □ 78.6%
- □ 85.2%

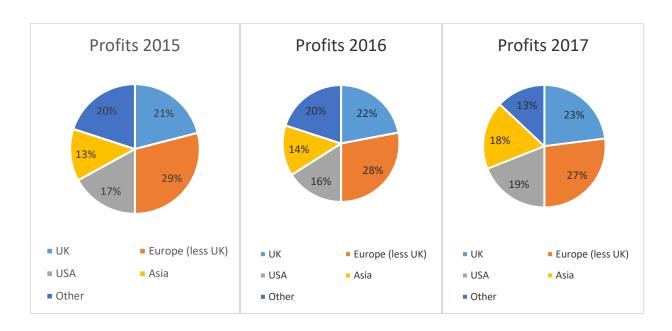
A company's annual profits from different parts of the world in 2015, 2016 and 2017 are £200m, £209m and £195m respectively.



Which of the following best represents the ratio of profits between USA in 2016 with UK in 2017?

- □ 3:2
- □ 5: 4
- □ 10:9
- \square 2: 3
- \square 3:4

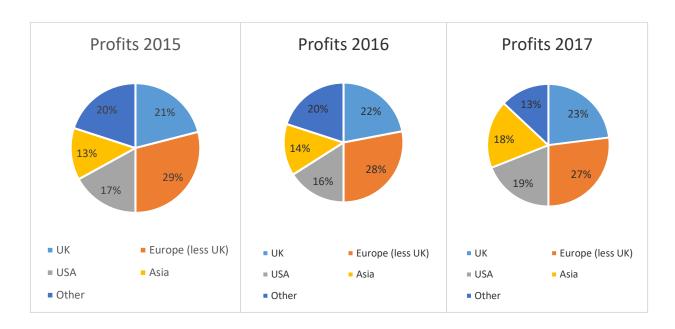
A company's annual profits from different parts of the world in 2015, 2016 and 2017 are £200m, £209m and £195m respectively.



For the UK, in which of the two previous years do the profits fall below those from 2017?

- □ 2015
- □ 2016
- ☐ Neither
- ☐ Both
- ☐ Cannot tell

A company's annual profits from different parts of the world in 2015, 2016 and 2017 are £200m, £209m and £195m respectively.



What are the average profits from Asia over the last two years?

- □ £27.63*m*
- □ £30.12*m*
- □ £30.55*m*
- □ £32.18*m*
- □ £32.32*m*

The table below summarises the number of visitors to a museum over a 5 month period.

	Adult	Junior	Concession	Free	Total
	(at £10)	(at £7)	(at £4)	(at £0)	
May	600	400	200	100	1,300
June	700	250	300	100	1,350
July	900	800	350	150	2,200
August	950	900	450	200	2,500
September	600	300	250	100	1,250

What percentage of the fee paying visitors in August are Juniors?

- □ 30.0%
- □ 33.3%
- □ 35.2%
- □ 36.0%
- □ 39.1%

The table below summarises the number of visitors to a museum over a 5 month period.

	Adult	Junior	Concession	Free	Total
	(at £10)	(at £7)	(at £4)	(at £0)	
May	600	400	200	100	1,300
June	700	250	300	100	1,350
July	900	800	350	150	2,200
August	950	900	450	200	2,500
September	600	300	250	100	1,250

In which month is the highest percentage of Concessions recorded?		
□ May		
□ June		
□ July		
☐ August		
□ September		

The table below summarises the number of visitors to a museum over a 5 month period.

	Adult	Junior	Concession	Free	Total
	(at £10)	(at £7)	(at £4)	(at £0)	
May	600	400	200	100	1,300
June	700	250	300	100	1,350
July	900	800	350	150	2,200
August	950	900	450	200	2,500
September	600	300	250	100	1,250

What is the percentage increase in the number of Juniors visiting in July compared to June?

- □ 31.25%
- □ 45.45%
- □ 145.45%
- □ 220%
- □ 320%

The table below summarises the number of visitors to a museum over a 5 month period.

	Adult (at £10)	Junior (at £7)	Concession (at £4)	Free (at £0)	Total
May	600	400	200	100	1,300
June	700	250	300	100	1,350
July	900	800	350	150	2,200
August	950	900	450	200	2,500
September	600	300	250	100	1,250

For all visitors in May what is the average admission price paid?

- □ £8.00
- □ £7.46
- □ £7.38
- □ £7.00
- □ £5.25

The table below summarises the number of visitors to a museum over a 5 month period.

	Adult	Junior	Concession	Free	Total
	(at £10)	(at £7)	(at £4)	(at £0)	
May	600	400	200	100	1,300
June	700	250	300	100	1,350
July	900	800	350	150	2,200
August	950	900	450	200	2,500
September	600	300	250	100	1,250

In the three months July-September, what is the ratio of the income from Adults to the income from Juniors?

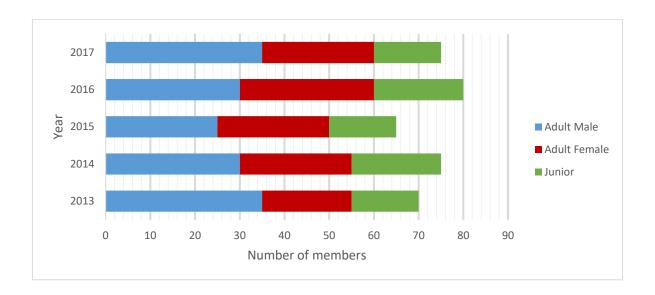
- □ 7: 4
- □ 10:7
- □ 11:7
- □ 7:11
- □ 4:11

The table below summarises the number of visitors to a museum over a 5 month period.

	Adult	Junior	Concession	Free	Total
	(at £10)	(at £7)	(at £4)	(at £0)	
May	600	400	200	100	1,300
June	700	250	300	100	1,350
July	900	800	350	150	2,200
August	950	900	450	200	2,500
September	600	300	250	100	1,250

In which month did the lowest weekly total of free admissions occur?
□ May
□ June
☐ September
☐ May, June or September
☐ Cannot tell

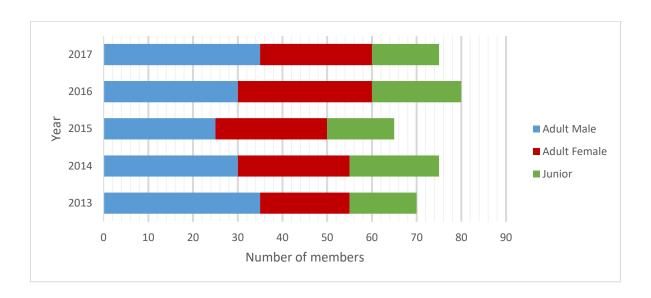
The breakdown of the membership of a tennis club over five years is shown below.



Over the years 2013 to 2017 inclusive what is the average for Junior membership?

- □ 15
- □ 17
- □ 17.5
- □ 63
- □ 73

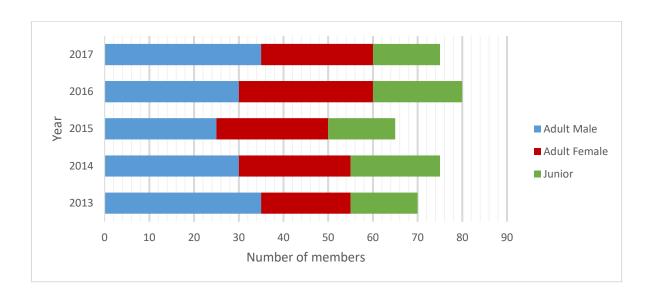
The breakdown of the membership of a tennis club over five years is shown below.



In 2013 what percentage of the membership is Adult Female?

- □ 28.6%
- □ 35%
- □ 50%
- □ 55%
- □ 78.6%

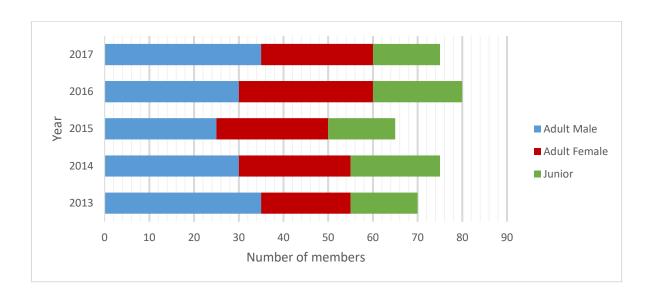
The breakdown of the membership of a tennis club over five years is shown below.



What is the overall percentage increase in membership between 2015 and 2016?

- □ 12.31%
- □ 15.00%
- □ 18.75%
- □ 23.08%
- □ 26.65%

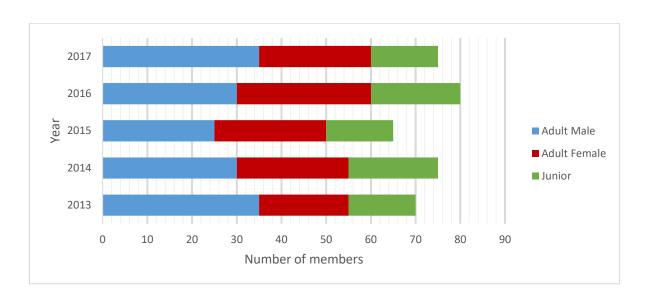
The breakdown of the membership of a tennis club over five years is shown below.



In which year is the ratio Adult Male to Adult Female to Junior 6: 5: 4?

- □ 2013
- □ 2014
- □ 2015
- □ 2016
- □ 2017

The breakdown of the membership of a tennis club over five years is shown below.



In how many years is Adult Male membership less than 35% of the total membership?

- \Box 0
- \Box 1
- \square 2
- □ 3
- □ 4

END OF TEST
This resource was produced by the sigma Network Employability Special Interest Group whose members are:
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