

This webinar will start shortly.

Thank you for your patience.
(No audio yet.)

This will be recorded and will be available on our YouTube channel
Slides will be emailed to you within 48 hours
This webinar will last no longer than 1 hour

 Medical Projects



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**MEDICAL
PROJECTS**


Quantitative Reasoning & Decision Making

20 minutes discussion
25 Minutes Q&A from students

Host: Mark Williams
Founder of Medical Projects

Panelist: Minnie K.
Manchester University

 Medical Projects



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**MEDICAL
PROJECTS**


Housekeeping and Introductions:

- This webinar will finish before 8pm
- We will send a recording and slides out within 48 hours
- Q&A section at the end
- Please use the Upvote system
- We will be using poll questions, get involved!

Quantitative Reasoning: The Basics

- 36 questions
- 1 minute instruction time and 24 minute test time
- Only 40 seconds per question
- Brush up on your mental maths
- Practise with the on screen calculator
- Get comfortable with...
 - Speed, distance, time
 - Estimates
 - Ratios
 - Mean, median, mode
 - Percentage change
 - Interest/taxes
 - Areas and volumes



Quantitative Reasoning: Question 1

Here is some information about costs of purchasing land.

Prime farmland is £7,500 per acre.

Building land is £1.1 million per hectare.

The table shows the costs, in thousands of pounds per hectare, of cleaning sites. These are paid in addition to the cost of purchasing the land.

Previous Use \ End Use	Factories	Garages, Sewage works	Metal workings, Scrapyards	Steel works Chemical works
Open Space	90	250	400	500
Residential	120	325	475	600
Employment	90	275	400	500
Mixed Use	90	300	475	550

1 hectare = $10,000 \text{ m}^2$ = 2.47 acres

How many whole hectares of prime farmland could be bought for the total cost of buying a 1 hectare derelict factory site and cleaning it for residential use?

- A) 39
- B) 65
- C) 162
- D) 362
- E) 401

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- E) 401

Total cost of land
(hectare)
£1,100,000 + £120,000

÷

Total cost of prime farmland
(hectare)
£7500 x 2.47

= 65 (B)

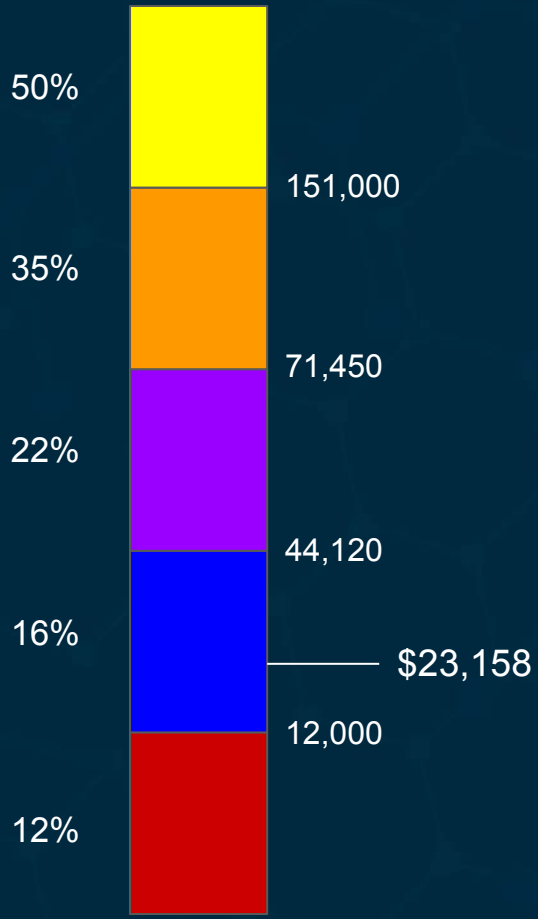
The table shows the total tax paid (\$) on annual taxable income.

For example, a person with an annual taxable income of \$30,000 will pay \$1,440 plus 16% of (\$12,000 – \$44,120)

Colette is a nurse and she earns \$23,158 a year. How much income tax does she pay?

- A) 2,778.96
- B) 3,225.28
- C) 3,241.28
- D) 4,096.28
- E) 5,145.28

Annual Taxable Income Bracket (\$)	Tax Rate	Total Tax paid (\$) at the top of this taxable income bracket
0 – 12,000	12%	1,440
12,000 – 44,120	16%	6,579.20
44,120 – 71,450	22%	12,591.80
71,450 – 151,000	35%	40,434.30
151,000 and over	50%	



$$23,158 - 12000 = 11,158$$

$$(11,158 \times 0.16) + 1440 = \$3,225.28 \text{ (B)}$$

Decision Making

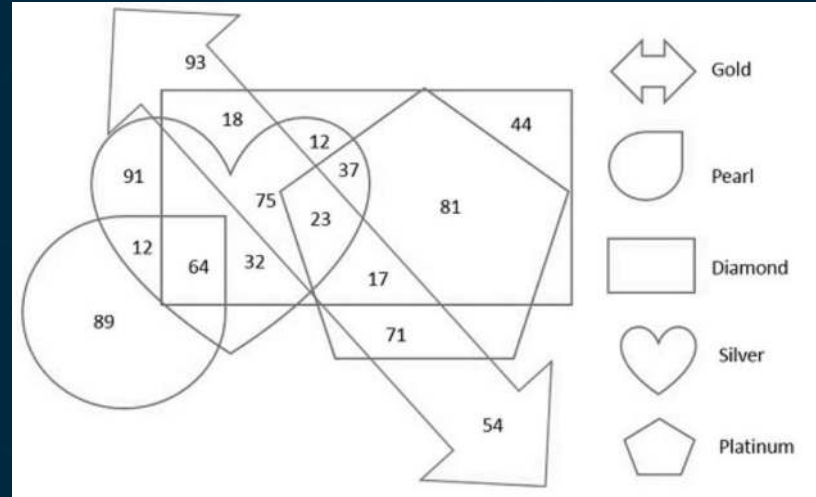
- 31 minutes test time
- 29 questions
- Around 63 seconds per question
- Applying logic to reach a decision
- Read the question carefully. Misunderstanding the language used can easily cause mistakes.
- Some, most, majority, few, all, not all, none, always, never
- Don't make assumptions
- Try drawing a diagram

Employees are promoted on the strength of their performance rating. A company rates all its employees between 1 and 4 for their bonus allocation. 1 is the highest, 4 is the lowest. Employees are only eligible for promotion after 3 years of service in the same position. All employees, and those eligible for promotion, must get a rating of 1 or 2 for a bonus payment.

Place 'Yes' if the conclusion does follow. Place 'No' if the conclusion does not follow.

- A. Diana got a rating of 4 this year so she will not receive bonus payment
- B. Brian was promoted 3 years ago, so it is definite he will be promoted this year
- C. Roger was promoted 5 years ago. He received a bonus this year. He did not get a 3 this year.
- D. Salim got a promotion after working for 2 years, so he cannot be working for the company
- E. The number of employees who receive a promotion each year is higher than the number of employees that do not receive a promotion

A designer jewellery showroom has jewellery made up of gold, diamond, silver, pearl and platinum. Each piece was crafted to include one or more of the materials.



Based on the diagram, how many jewellery pieces have gold, diamond and silver but not platinum or pearl?

- A. 12
- B. 37
- C. 64
- D. 75

Want a little extra help?

UCAT Crash Course

- Full day course 10am-4pm
- Cover every section in a lot more detail
- Fully interactive
- Small group sizes
- Taught by top 10% medical students

Normally £129 but with this code its only £49
(Expires tonight as spaces will fill up)

Discount code:
UCAT49

The screenshot shows a webpage for the 'MEDICAL PROJECTS UCAT CRASH COURSE'. The main heading is 'Course Timetable'. Below it, there is a note: 'This course is a 6.5 hour on-line course which includes everything you need to know about the UCAT exam and all the questions.' A section titled 'Please see the timetable below:' lists a schedule from 10:00 am to 4:00 pm. To the right, under 'Learning Objectives', there are three bullet points: 'You will be able to identify all the questions for the UCAT Exam.', 'You will be able to identify all the questions for the UCAT Exam and be able to answer them.', and 'You will be able to identify all the questions for the UCAT Exam and be able to answer them.' The schedule and objectives are as follows:

Time	Topic
10:00 am	Overview and introduction to the UCAT Exam
10:30 am	Verbal Reasoning
11:00 am	Quantitative Reasoning
11:30 am	Abstract Reasoning
12:00 pm	Writing Skills
12:30 pm	Reading Comprehension
1:00 pm	Medical Knowledge
1:30 pm	Decision Making
2:00 pm	Personal Statement
2:30 pm	Interview Preparation
3:00 pm	Final Review
3:30 pm	Q&A
4:00 pm	End of Day

Learning Objectives

- You will be able to identify all the questions for the UCAT Exam.
- You will be able to identify all the questions for the UCAT Exam and be able to answer them.
- You will be able to identify all the questions for the UCAT Exam and be able to answer them.

Q & A