OXFORD TUTORS

BioMedical Admissions Test   **4500/12**

BMAT Mock Paper 1   **30 minutes**

SECTION 2   **Scientific Knowledge and Applications**

INSTRUCTIONS TO CANDIDATES

Please read this page carefully, but do not open the question paper until you are told that you may do so.

This paper is Section 2 of 3. Your supervisor will collect this question paper and answer sheet before giving out Section 3.

A separate answer sheet is provided for this section. Please check you have one. You also require a soft pencil and an eraser.

Please complete the answer sheet with your:

- BMAT candidate number
- Centre number
- Date of birth
- Name

Speed as well as accuracy is important in this section. ***Work quickly, or you might not finish the paper***. There are no penalties for incorrect responses, only marks for correct answers, so you should attempt **all** 27 questions. Each question is worth one mark.

Answer on the sheet provided. Questions ask you to show your choice between options by shading one circle. If you make a mistake, erase thoroughly and try again.

You **must** complete the answer sheet within the time limit.

You can use the question paper for rough working or notes, but **no extra paper** is allowed.

Calculators are NOT permitted.

Please wait to be told you may begin before turning this page.

This paper consists of 18 printed pages and 1 blank page.

16 X-linked agammaglobulinaemia (XLA) is a rare disease where white blood cells aren't able to develop properly. Patients will often suffer from recurrent bacterial infections from the age of 6-9 months. Below is a family tree showing the inheritance of the disease in a particular family.

Key

Male = square
Female = circle
Healthy = white
XLA = black
Deceased = crossed
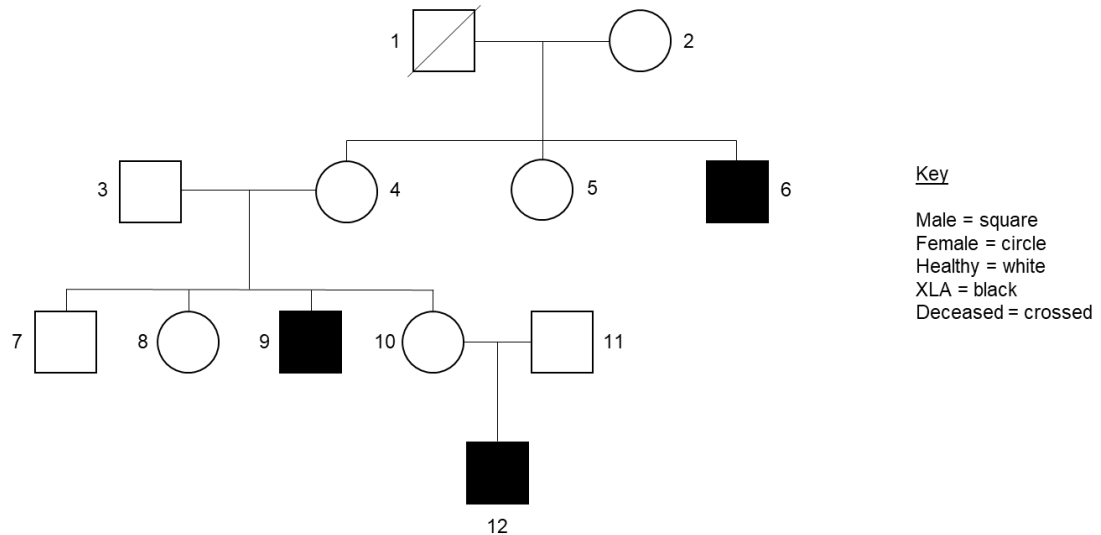
Which row in the table shows the probability the child of person 8 will also have XLA, assuming that their partner does not have the disease?

	Male child with XLA	Female child with XLA	Children who are carriers
A	0.00	0.00	1/8
B	0.00	0.25	1/8
C	0.25	0.00	1/8
D	0.25	0.25	1/8
E	0.00	0.00	1/4
F	0.00	0.25	1/4
G	0.25	0.00	1/4
H	0.25	0.25	1/4