



Oxford Cambridge and RSA

**Thursday 08 October 2020 – Afternoon**

**AS Level Further Mathematics A**

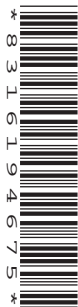
**Y532/01 Statistics**

**Printed Answer Booklet**

**Time allowed: 1 hour 15 minutes**

**You must have:**

- Question Paper Y532/01 (inside this document)
- the Formulae Booklet for AS Level Further Mathematics A
- a scientific or graphical calculator



Please write clearly in black ink. **Do not write in the barcodes.**

Centre number

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Candidate number

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First name(s)

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Last name

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**INSTRUCTIONS**

- Use black ink. You can use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the space provided in the **Printed Answer Booklet**. You can use extra paper if you need to, but you must clearly show your candidate number, the centre number and the question numbers.
- Answer **all** the questions.
- Where appropriate, your answer should be supported with working. Marks might be given for using a correct method, even if your answer is wrong.
- Give non-exact numerical answers correct to 3 significant figures unless a different degree of accuracy is specified in the question.
- The acceleration due to gravity is denoted by  $g\text{ m s}^{-2}$ . When a numerical value is needed use  $g = 9.8$  unless a different value is specified in the question.

**INFORMATION**

- The total mark for this paper is **60**.
- The marks for each question are shown in brackets [ ].
- This document has **8** pages.

**ADVICE**

- Read each question carefully before you start your answer.

<b>1(a)</b>	
<b>1(b)</b>	
<b>1(c)</b>	
<b>2(a)</b>	
<b>2(b)</b>	
<b>2(c)</b>	

<b>3(a)</b>	
<b>3(b)</b>	
<b>3(c)(i)</b>	
<b>3(c)(ii)</b>	
<b>3(d)</b>	

<b>4(a)</b>	
<b>4(b)</b>	
<b>4(c)</b>	
<b>5(a)</b>	

5(b)

Expected frequencies		Session		
		Early	Middle	Late
Age group	< 25	29.4	23.1	
	≥ 25	26.6	20.9	

**Table 2**

Contribution to $\chi^2$		Session		
		Early	Middle	Late
Age group	< 25	0.9918	0.4160	
	≥ 25	1.0962	0.4598	

**Table 3**

5(c)

<b>5(d)</b>	
<b>6(a)</b>	
<b>6(b)</b>	
<b>6(c)</b>	
<b>6(d)</b>	

6(e)

Value of $F$	0	1	$\geq 2$
Probability	0.200		

6(f)

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(answer space continued on next page)

<b>7 (continued)</b>	

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