Solutions

Each answer shows the steps, then the **result**.

2.1

- names a measurable time, e.g. “within 2 seconds”
- names the action and size, e.g. “pairings for up to 40 players appear after pressing *Pair*”

2.2

- normal: any value from 2 to 19, e.g. **10**
- boundary: **1** or **20**
- invalid: **0**, **21**, or a non-number such as “five”

2.3

- it names features without saying how or why they are used in this product
- it should show a code extract of a key technique and explain what it does and why it was chosen

3.1 B

- 18 is the top edge of the allowed range

3.2 B

- it fixes what must be shown to work before the product exists

3.3 B

- acknowledging, adapting and explaining is academic integrity

3.4

(a) Any two testable criteria, e.g.:

- an order with one main and up to two sides is saved, and the student sees a confirmation
- orders after 10:00 are refused with a message; the kitchen list prints in under 5 s

(b)

- normal: one side, **accepted**
- boundary: two sides, **accepted**
- invalid: three sides, **rejected with a message**

(c)

- the kitchen prepares meals in the order they are collected
- so sorting by collection time gives a list that can be worked through from the top

(d)

- the criterion is **not met**: “by 10:00” includes 10:00
- the likely cause is a boundary error, `<` used where `<=` was needed
- fix the comparison, re-run the test and record both results as evidence

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