Validation, Verification & Testing

Algorithm A

```
01  Mobile ← INPUT
02  IF LEN(Mobile) <> 11
03      THEN
04          OUTPUT "Number Invalid"
05      ELSE
06          OUTPUT "Number Valid"
07  ENDIF
```

Algorithm B

```
01  Age ← INPUT
02  IF age >= 11 AND age <= 18
03      THEN
04          OUTPUT "Within range"
05      ELSE
06          OUTPUT "Out of range"
07  ENDIF
```

Algorithm C

```
01  TestResult ← INPUT
02  ResultConfirm ← INPUT
03  IF TestResult = ResultConfirm
04      THEN
05          OUTPUT "Result valid"
06      ELSE
07          OUTPUT "Please re-enter"
08  ENDIF
```

1. Which of the example algorithms is an example of verification? (1)

2. Which of the example algorithms is an example of range check validation? (1)

3. Which of the example algorithms is an example of length check validation? (1)

4. Name one other type of validation. (1)

5. Complete this test table for Algorithm A. (1)

Description	Test Type	Test Data	Expected Outcome
Test a value longer than the expected length.	Erroneous	070000000000000	"Number Invalid"
	Normal		

6. Complete this test table for Algorithm B. (3)

Description	Test Type	Test Data	Expected Outcome
	Boundary		
	Erroneous		
	Normal		

7. A weather station records daily temperature readings in London, no reading has ever gone above 40°C or below -20°C. Design a validation algorithm to check the temperature readings that are entered. (4)

8. Complete this test table for algorithm you designed in the previous question. (3)

Description	Test Type	Test Data	Expected Outcome
	Boundary		
	Erroneous		
	Normal		