6 This pseudocode is an algorithm.

```
DECLARE Word : STRING
DECLARE V1 : INTEGER
DECLARE V2 : INTEGER
DECLARE Number : INTEGER
DECLARE Index : INTEGER
DECLARE L1 : CHAR
DECLARE L2 : CHAR
DECLARE Continue : BOOLEAN
INPUT Number
FOR Index ← 1 TO Number
    INPUT Word
    Continue ← TRUE
    V1 ← 1
    V2 ← LENGTH(Word)
    WHILE Continue = TRUE AND V1 < V2 DO
        L1 ← SUBSTRING(Word, V1, 1)
        L2 ← SUBSTRING(Word, V2, 1)
        IF L1 <> L2
          THEN
            Continue ← FALSE
          ELSE
            V1 ← V1 + 1
            V2 ← V2 - 1
        ENDIF
    ENDWHILE
    IF Continue = TRUE
      THEN
        OUTPUT "Successful"
      ELSE
        OUTPUT "NOT successful"
    ENDIF
NEXT Index
```

(a) Complete the trace table for the algorithm, using the input data:

2, RACECAR, TREAT

Number	Index	Word	Continue	V1	V2	L1	L2	OUTPUT

[6]

(b) State the purpose of the algorithm on page **6**.

.....

..... [1]

(c) Explain how the algorithm knows when all the letters in the word have been checked so that it can stop checking.

.....

.....

.....

.....

.....

..... [3]