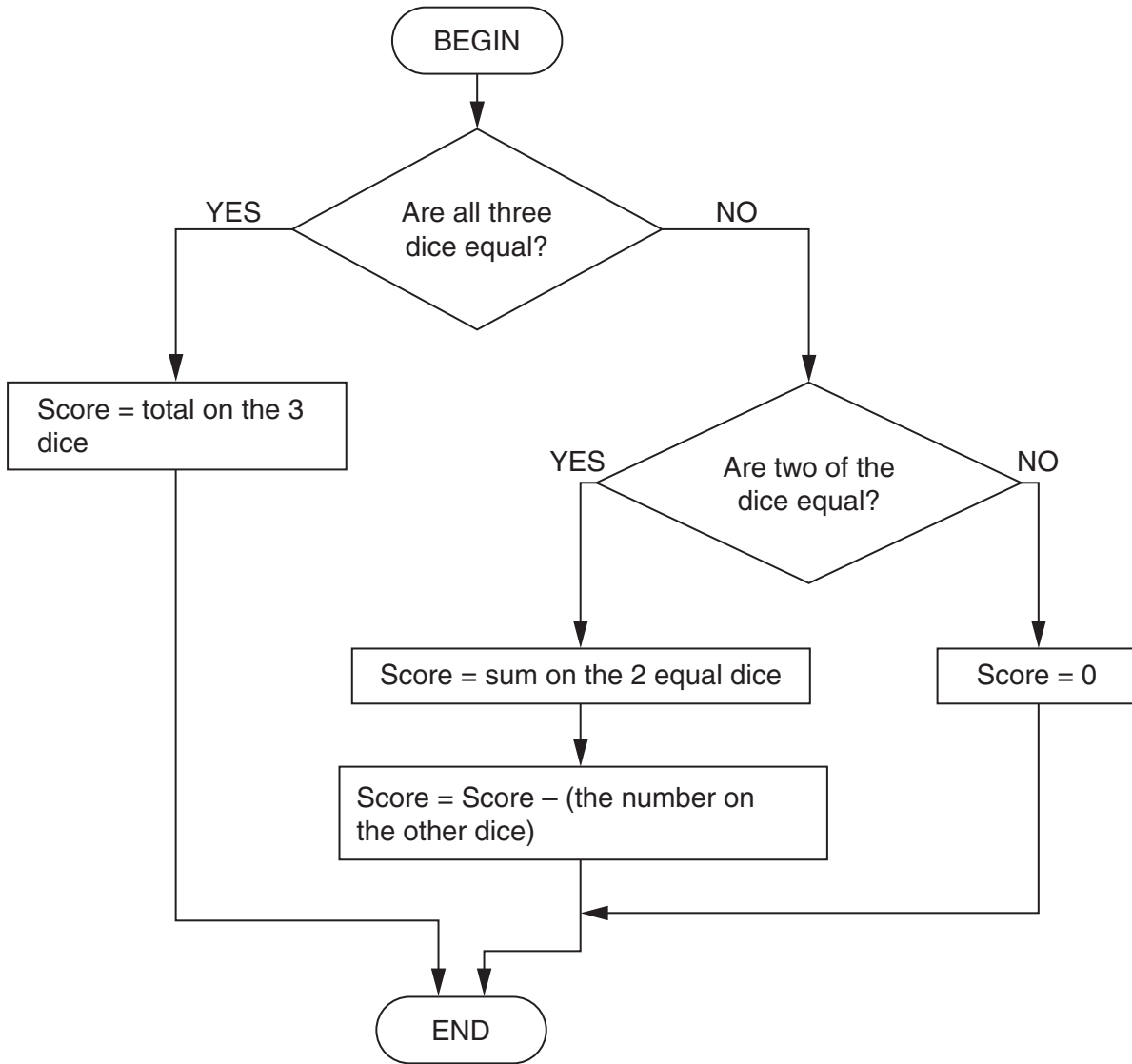


11 Frances is writing a program which simulates a dice game played with three ordinary 6-sided dice.

(a) When the player rolls the three dice, the player is given points according to the algorithm expressed in the flow diagram below.



State the value of the score if the dice rolled are

3 4 5 Score :

4 4 4 Score :

5 5 6 Score :

[3]

(b) Some rolls of the dice result in a negative score.

State a set of three numbers which can be used to test whether the algorithm produces a negative score when it should, and state the expected output for your test data.

Set of test data:

Expected output: [2]

When the dice are rolled, the results are stored in an array called DiceResult.

For example, if the first dice shows a 5 then the value of DiceResult(1) becomes 5.

(c) Describe what is meant by an array.

.....
.....
.....
..... [2]

(d) State the data type and size of the array DiceResult giving a reason for each.

Data type of DiceResult:

Reason:

.....

Size of array DiceResult:

Reason:

..... [4]

PLEASE TURN OVER FOR THE LAST QUESTION

(e) The routine for rolling the dice is written as a sequence below.

```
BEGIN RollTheDice
  DiceResult(1) = Random Number between 1 and 6
  DiceResult(2) = Random Number between 1 and 6
  DiceResult(3) = Random Number between 1 and 6
END
```

Rewrite this routine so that it uses iteration.
You may use a diagram.

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..... [4]

[END]