

Numerical Methods (MATH2300 PP)

Question 1

Not yet answered

Marked out of 0.50

Flag question

The number of different polynomials that can go through two fixed data points (x_1, y_1) and (x_2, y_2) is ?

Select one:

- ☐ a. 2
- ☐ b. 1
- ☐ c. 0
- ☒ d. infinite

[Clear my choice](#)**Question 2**

Not yet answered

Marked out of 0.50

Flag question

Given three data points $(1, 6)$, $(3, 28)$, and $(10, 231)$, it is found that the function $y = 2x^2 + 3x + 2$ passes through the three data points. Your estimate of y at $x = 2$ is most nearly ?

Select one:

- ☐ a. 6
- ☒ b. 17
- ☐ c. 15
- ☐ d. 28

[Clear my choice](#)**Question 3**

Not yet answered

Marked out of 0.50

Flag question

The Delta of power two is called the ____order difference operator?

Select one:

- ☒ a. Second
- ☐ b. First
- ☐ c. Fourth
- ☐ d. Third

[Clear my choice](#)

Quiz navigation

1	2	3	4	5	6	7	8	9
10								

[Finish attempt ...](#)Time left **0:12:35**

Question 4

Not yet
answeredMarked out of
0.50

Flag question

Let h be the finite difference, then forward difference operator is defined by ____?

Select one:

- ☒ a. $f(x) = f(x+h)-f(x)$
- ☐ b. $f(x) = f(x-h)-f(x)$
- ☐ c. $f(x) = f(x)$
- ☐ d. $f(x) = f(x*h)$

[Clear my choice](#)

Question 5

Not yet
answeredMarked out of
0.50

Flag question

Polynomials are the most commonly used functions for interpolation because they are easy to?

Select one:

- ☐ a. integrate
- ☐ b. differentiate
- ☒ c. evaluate, differentiate and integrate
- ☐ d. evaluate

[Clear my choice](#)

Question 6

Not yet
answeredMarked out of
0.50

Flag question

Given $n+1$ data pairs, a unique polynomial of degree _____ passes through $n+1$ data points?

Select one:

- ☒ a. n
- ☐ b. $n+1$ or less
- ☐ c. $n+1$
- ☐ d. n or less

[Clear my choice](#)


Question 7

Not yet

Newton backward interpolation formula is used for _____ intervals?

[Clear my choice](#)

Question 7

Not yet
answeredMarked out of
0.50 Flag question


Newton backward interpolation formula is used for _____ intervals?

Select one:

- ☒ a. Equal
- ☐ b. Open
- ☐ c. Closed
- ☐ d. Unequal

[Clear my choice](#)

Question 8

Not yet
answeredMarked out of
0.50 Flag question


Interpolation is a method of?

Select one:

- ☐ a. Combining
- ☐ b. Integrating
- ☒ c. Estimating
- ☐ d. Interrelating

[Clear my choice](#)

Question 9

Not yet
answeredMarked out of
0.50 Flag question

Linear interpolation is?

Select one:

- ☐ a. Easy
- ☐ b. None of the mentioned
- ☒ c. Easy & Precise
- ☐ d. Precise

[Clear my choice](#)

Flag question

- ☐ b. Integrating
- ☒ c. Estimating
- ☐ d. Interrelating

[Clear my choice](#)

Question 9

Not yet
answeredMarked out of
0.50

Flag question

Linear interpolation is?

Select one:

- ☐ a. Easy
- ☐ b. None of the mentioned
- ☒ c. Easy & Precise
- ☐ d. Precise

[Clear my choice](#)

Question 10

Not yet
answeredMarked out of
0.50

Flag question

Find n if $x_0 = 0.75825$, $x_n = 0.759$ and $h = 0.00005$?

Select one:

- ☐ a. 1.5
- ☐ b. 2.5
- ☒ c. 15
- ☐ d. 25

[Clear my choice](#)

Finish attempt ...