## MATH 1 EOC RELEASED TEST QUESTIONS FROM THE NORTH CAROLINA DEPARTMENT OF PUBLIC INSTURCTION

See the full released test on NC DPI Website: https://www.dpi.nc.gov/eoc-nc-math-1-released-form

## NC MATH 1 EOC RELEASED TEST: Question 13

Gridded Response, Calculator Inactive, Depth of Knowledge (DOK) Level 1 - Recall

What is the value of the positive zero of the function, f, defined by  $f(x) = x^2 - 121$ ?

## NC MATH 1 EOC RELEASED TEST: Question 43

Multiple Choice, Calculator Active, DOK Level 2 - Skill/Concept

The vertices of a rectangle are located at (1, 2), (5, 0), (2, -6), and (-2, -4). What is the area of the rectangle?

А	20 square units	В	30 square units
С	35 square units	D	45 square units

## NC MATH 1 EOC RELEASED TEST: Question 16

Multiple Choice, Calculator Active, DOK Level 3 - Critical Thinking

A statistician collected the following data to explore the relationship between two variables, *x* and *y*.

x	y
2.3	11.0
4.2	16.5
5.1	19.2
6.4	23.1
8.2	24.3
8.5	29.5

The statistician performed a linear regression and also plotted the residuals.

- Based on the residual plot, the statistician decided to exclude one data point.
- The statistician then performed linear regression on the set of remaining data points.
- The result was that the new linear model fit the remaining data more closely than the original model fit the original data.

Which data point did the statistician exclude?

А	(2.3, 11.0)	В	(4.2, 16.5)
С	(6.4, 23.1)	D	(8.2, 24.3)