

Are you ready for MTH 161?

The purpose of this review is to verify your readiness for MTH 161.

You do not need to solve these problems.

Simply review them and answer the three questions below.

- *Do these math problems below look familiar to you?*
- *Have you learned these types of problems in prior math classes?*
- *If you reviewed this material, would you be able to solve most of these problems?*

1. Simplify the following expressions.

a. $(-2x^3y^6)^3$ b. $\frac{40x^3y^3}{5x^4y}$ c. $(5a^2b^3) \cdot (3b^2c^3)$

2. Given $f(x) = -x^2 + 6x - 11$, identify the vertex, x- and y- intercepts and sketch the graph.

3. Factor the following completely.

a. $3b^3 - 15b^2 - 42b$

b. $8x^3z - 27y^6z$

c. $4x^2 - 8x - 16$

4. Solve the following equations.

a. $2x^2 = x + 3$

b. $\sqrt{x + 3} = 5$

c. $\frac{3}{x} + \frac{2}{x+1} = \frac{3}{x+1}$

5. Solve the inequality and sketch your solution on a number line.

$$2x - 3 < 3x + 5$$

6. Find the equation of the line in Slope-intercept form passing through the points $(-2,5)$ and $(0,2)$.

COURSE PLACEMENT RECOMMENDATIONS

- If you answered yes to at least two of the questions, you should consider enrolling in MTH 161. Since MTH 167 is a fast-paced, 5-credit precalculus course which covers topics in both MTH 161 and 162, it should only be considered for students with a strong algebra foundation.
- If you answered yes to one of the questions, you should consider enrolling in MTH 161 with the co-requisite course MDE 61.
- If you answered no to all three questions, refer to “Are you ready for MTH 154 or Algebra?” to determine if MDE 10 or 60 is the right class for you.

HAVE QUESTIONS OR NEED HELP ENROLLING IN YOUR CLASSES?

We are here to help!

Contact an advisor at virtualadvising@nvcc.edu
or visit <https://www.nvcc.edu/advising/supports/index.html>