Tips for the Calculator-Prohibited Section of the Mathematical Reasoning GED® Test

Non-calculator questions make up about 12% of the points on the Mathematical Reasoning GED® Test and assess foundational arithmetic skills including

- The four basic operations (addition, subtraction, multiplication, and division)
- Exponents and roots,
- Order of operations,
- Scientific notation, and
- Basic number sense.

The following examples of calculator-prohibited questions address the skills students need in each of the identified GED® test assessment target/indicator areas. For multiple choice questions, the correct answer is indicated by an asterisk (*).

Q.1.a: Order fractions and decimals, including on a number line.

A list of numbers is shown.

\[
\frac{3}{4}, 0.6, \frac{5}{16}, 0.15, \frac{3}{8}
\]

Which list shows the numbers in order from least to greatest?

- A* \(0.15, \frac{5}{16}, \frac{3}{8}, 0.6, \frac{3}{4}\)
- B \(\frac{5}{16}, 0.15, \frac{3}{8}, 0.6, \frac{3}{4}\)
- C \(0.6, 0.15, \frac{3}{8}, \frac{5}{16}\)
- D \(0.15, 0.6, \frac{5}{16}, \frac{3}{8}, \frac{3}{4}\)

Q.1.d: Identify absolute value of a rational number as its distance from 0 on the number line and determine the distance between two rational numbers on the number line, including using the absolute value of their difference.

The numbers -8 and -3 are plotted on a number line. What is the distance, in units, between the two points?

- A -11
- B -5
- C* 5
- D 11
Q.2.a: Perform addition, subtraction, multiplication, and division on rational numbers.

Multiply.

\[ 2.25 \times 1.6 \]

A 0.1675
B 0.36
C 1.675
D* 3.6

Q.2.b: Perform computations and write numerical expressions with squares and square roots of positive, rational numbers.

An expression is shown.

\[ \sqrt{15} \cdot \sqrt{12} \]

Simplify the expression completely. Leave your answer in radical form. Type your answer in the box. Use only numbers and symbols in your answer. (NOTE: Click the symbol selector when you need to enter the radical sign.)

Correct answer: \[ 6\sqrt{5} \]

Q.2.d: Determine when a numerical expression is undefined.

What value of \( x \) makes the expression \( \frac{1}{2x} \) undefined?

A -2
B -1
C* 0
D \( \frac{1}{2} \)