## Tips for the Calculator-Prohibited Section of the Mathematical Reasoning GED ${ }^{\circledR}$ Test

Non-calculator questions make up about $12 \%$ of the points on the Mathematical Reasoning GED ${ }^{\circledR}$ 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 ${ }^{\circledR}$ 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* $^{*} \quad 0.15, \frac{5}{16}, \frac{3}{8}, 0.6, \frac{3}{4}$
B $\frac{5}{16}, 0.15, \frac{3}{8}, 0.6, \frac{3}{4}$
C $\quad 0.6,0.15, \frac{3}{4}, \frac{3}{8}, \frac{5}{16}$
D $\quad 0.15,0.6, \frac{5}{16}, \frac{3}{8}, \frac{3}{4}$
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 $\quad 1.675$
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 $\frac{1}{2 x}$ undefined?
A -2
B $\quad-1$
C* 0
D $\frac{1}{2}$

