## WHAT MATH TEST IS RIGHT FOR YOU?

Test 1: Algebra Basics

| Operation with Fractions | $\frac{3}{3}(+,-, \times, \div) \frac{2}{3}$ |
| :---: | :---: |
| Operation with sign numbers | -10+3-(-5) |
| Order of Operations | 3(7)+2.4-8 ${ }^{2}$ PEMDAS: ( ), $x^{2}, \times, \dot{-},+,-$ |
| Substituting values into algebraic expressions | Evaluate the expression if $x=-3, y=4$, and $a=4$ $3 x-5 y+4 a$ |
| Basic Operations with Polynomials | $\left(5 x^{2}+6 x-3\right)+\left(x^{2}-7 x-9\right)$ |
| Solving linear equations in one variable | $x+6=-3$ |

## YOU CHOOSE!

Test 2: Algebra Core

| Evaluating Functions | $\begin{aligned} & \text { If } f(x)=3 x^{2}-5, \text { find } f(-3) \\ & f(-3)= \\ & \hline \end{aligned}$ |
| :---: | :---: |
| Linear Equation in two variables/Linear Functions | $\mathrm{y}=\mathrm{m} \mathrm{x}+\mathrm{b}$ |
| Linear inequalities and interval notation | $-20 x-40 \leq-5(3 x+13)$ |
| Quadratic equations and functions | $3 x^{2}-5 x-7=0$ |
| Solve systems of equations | $\begin{array}{\|cc} \hline 3 y-2 x=11 & y= \\ y+2 x=9 & x= \\ \hline \end{array}$ |
| Operations with polynomials | $-9 x^{3}\left(-2 x^{3}-5 x^{2}+1\right)$ |
| Rules of Exponents | $\frac{3 y^{-4}}{(5 y)^{3}}$ |

## Test 3: Algebra STEM

- Factoring
- Completing the square
- Simplifying rational expressions
- Simplifying expressions with radicals/fractional exponents
- Simplifying logarithmic expressions using Laws of Logarithms
- Solving quadratic equations
- Solving rational equations
- Solving radical equations
- Solving exponential equations
- Solving logarithmic equations
- Properties of quadratic, rational, radical, exponential, and logarithmic functions (evaluating, domain,...)
- Algebra of functions
- Composition of functions
- Inverse functions


## Test 4: Trigonometry

- Evaluating trigonometric expressions
- Right triangle trigonometry
- Properties of trigonometric functions (domain, amplitude, period,...) and their inverses
- Simplifying trigonometric expressions using identities
- Solving trigonometric equations

