### **Basic Operation Buttons:**

1. 
$$-7|2(-3) - 15| + (\sqrt{8})^2 - \sqrt[3]{8} + 2^4$$

#### **Basic Fraction Operations:**

- 2.  $\frac{9}{7} + \frac{8}{3}$  (Leave answer as a mixed number)
- 3.  $5\frac{1}{8} + 2\frac{1}{2}$  (Leave answer as a decimal)
- 4.

Marco and Sasha are building a barn. They started with 7 pounds of screws. On the first day, Marco used  $1\frac{3}{4}$  pounds of screws and Sasha used  $2\frac{1}{2}$  pounds of screws. How many pounds of screws were left when they completed their first day of building?

### **Basic Operations with Matrices:**

5. 
$$5\begin{bmatrix} -1 & -2 & -3 \\ 4 & 5 & 6 \end{bmatrix} - 3\begin{bmatrix} 10 & 0 & 5 \\ -8 & 12 & 1 \end{bmatrix}$$
  
6.  $\begin{bmatrix} 1 & 2 \\ 3 & 4 \\ 5 & 6 \end{bmatrix} \cdot \begin{bmatrix} -1 & -2 \\ -11 & 4 \end{bmatrix}$ 

# Using "rref" and Matrices to Solve Systems of Equations:

7. 
$$\begin{cases} x = 7y - 11 \\ 5x + 2y = -18 \end{cases}$$

### Solve Equations with a Graph:

8. In the real numbers, what is the solution to the equation  $16^{x-4} = 64^{4x+4}$ ?

### **Complex Numbers:**

9. Evaluate  $i^{11}$ .

## Logarithms:

10. What value of x satisfies the equation  $\log_{27} x = -\frac{2}{3}$ ?