Instructions:

- Copy and answer on your notebook
- Write your name, section, and the date today
- Write PT #1 on top of your paper
- Show your complete solution (6pts each item)
- Take a picture of your written work and send it back through EDUCERE LMS

PT 1: Solving Quadratic Equations Using Quadratic Formula (30pts)

1. Identify two values of x so that $x^2 - 5x - 24 = 0$. (6pts)

2. If -6 is one of the values of x that satisfies the equation $x^2 + 3x - 18 = 0$, what is the other number? (6pts)

3. Solve the following quadratic equations using Quadratic Formula:

   a. $x^2 - 4 = 0$ (6pts)

   b. $2x^2 + 4x - 9 = 0$ (6pts)

4. Using Quadratic Formula, prove that the values of x that satisfy the equation $4x^2 + 6x - 4 = 0$ are 1/2 and -2. (6pts)

Steps:

1. Rewrite in standard form
   $$ax^2 + bx + c = 0$$
2. Determine the values of a, b, and c (3pts)
3. Substitute the values into the quadratic formula (1pt)
   $$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$
4. Simplify (2pts)

"Believe you can and you're halfway there."

—THEODORE ROOSEVELT

RS