Math in LaTex

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Second Exercise

1. **Inline Formula:** This is an $x^2 + 4y^2 = z^2$ inline equation.

2. **Displayed Formula:** Display an equation as a centered formula.

$$F = ma \tag{1}$$

3. **Multiple Aligned Equations:** Display equations aligned.

$$p(x) = x^4 - 2x^3 + 5x - 8 \tag{2}$$
$$q(x) = 3x^2 - 7x + 2 \tag{3}$$

4. **Fraction:** $\frac{x^2+2x+1}{y^2-3y+2}$

5. **Square Root:**

$$\sqrt{49} = 7 \tag{4}$$

6. **Cube Root:**

$$\sqrt[3]{x^9 + y^6} \tag{5}$$

7. **Derivative:**

$$\frac{d}{dx}(3x^3 + 2x^2) = 9x^2 + 4x \tag{6}$$