

Written HW1 – MATH 1540 Spring 2023

1. Apply the distributive law to completely simplify the expression

$$(x + y + 1)(2x - y + 3).$$

2. Solve the equation $x^2 + x + 1 = 0$.

3. Solve

$$\frac{x - 1}{3} + \frac{2x + 1}{5} + \frac{8 - x}{7} = x.$$

4. Solve the equation $3x^2 - 5x + 2 = x^2 - x - 1$.

5. Solve the equation $x(x + 7) + x(x + 1) = 2(x^2 - 3)$.