

1. **(3 points)** Solve the equation $3y^2 + 2y = 1 - 4y$.

2. **(5 points)** Solve the equation $x + \sqrt{x - 2} = 2$.

3. **(3 points)** Solve the inequality $1 - \frac{t}{3} < 2$. Write the solution in either interval notation or as conditions on t .

4. **(4 points)** Solve the inequality $\frac{3x+2}{x-2} \leq 0$. Write the solution in either interval notation or as conditions on x .