

**Solve each equation. Remember to check for extraneous solutions.**

1)  $\frac{6}{2n^2 + 5n + 2} - \frac{1}{2n + 1} = \frac{1}{2n^2 + 5n + 2}$

2)  $\frac{2}{n^2 - n} = \frac{5}{n} - \frac{1}{n^2 - n}$

3)  $\frac{2}{x} - 1 = \frac{1}{x}$

4)  $\frac{1}{x + 4} = \frac{1}{x^2 + 4x} - \frac{5x - 25}{x^2 + 4x}$

5)  $\frac{1}{x + 1} = \frac{x + 6}{x + 1} + \frac{x^2 + x - 20}{x^2 - 4x - 5}$

6)  $1 - \frac{5}{v^2 + v - 20} = \frac{v + 4}{v + 5}$

7)  $\frac{3}{n - 1} = \frac{1}{2} - (n - 4)$

8)  $\frac{1}{x^2 + 4x} = 1 - \frac{x - 2}{x}$