Evaluating and Solving Functions

1. Evaluate $f(3)$ and solve $f(x) = \frac{1}{2}$ for:

   $$f(x) = 3x + 1$$

2. Evaluate $f\left(\frac{1}{2}\right)$ and solve $f(x) = 3$, $f(x) = 5$, and $f(x) = 2$ for:

   $$f(x) = 2x^2 - 3x + 4$$

3. Evaluate $f(4)$ and solve $f(x) = -1$ for:

$$f(x) = \sqrt{2x + 1} - 1$$

4. Evaluate $f(3)$ and solve $f(x) = \frac{5}{4}$ for:

$$f(x) = \frac{1}{x-1} + \frac{1}{x+2}$$

5. Evaluate $f(3)$ and solve $f(x) = 10$ for:

$$f(x) = |x - 6|$$