

Exercises 1.6

Simplify the following expressions. Express the answer as a single, reduced fraction.

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

$$2. \frac{\frac{2}{x-2} + \frac{1}{x+2}}{\frac{6}{x^2-4}}$$

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

$$4. \frac{\frac{1}{x+1} - 1}{1 + \frac{1}{x+1}}$$