

$$1. \quad \frac{a + \frac{1}{b}}{b + \frac{1}{a}} \quad \frac{\frac{ab}{b} + \frac{1}{b}}{\frac{ab}{a} + \frac{1}{a}} \quad \frac{\frac{ab+1}{b}}{\frac{ab+1}{a}} \quad \frac{a}{b}$$

$$2. \quad \frac{a^{-1} + ab^{-2}}{ab^{-2} - a^{-2}b^{-1}} \quad \frac{\frac{1}{a} + \frac{a}{b^2}}{\frac{a}{b^2} - \frac{1}{a^2b}} \quad \frac{\frac{b^2 + a^2}{ab^2}}{\frac{a^3 - b}{a^2b^2}} \quad \frac{ab^2 + a^3}{a^3 - b}$$

$$3. \quad \frac{\frac{a^2}{b} - b}{\frac{b^2}{a} - a} \quad \frac{\frac{a^2}{b} - \frac{b^2}{b}}{\frac{b^2}{a} - \frac{a^2}{a}} \quad \frac{\frac{a^2 - b^2}{b}}{\frac{b^2 - a^2}{a}} \quad -\frac{a}{b}$$

$$4. \quad \frac{\frac{a}{a+1} - 1}{\frac{2a+1}{a-1}} \quad \frac{\frac{a}{a+1} - \frac{a+1}{a+1}}{\frac{2a+1}{a-1}} \quad \frac{-1}{\frac{2a+1}{a-1}} \quad \frac{-a+1}{(a+1)(2a+1)}$$