

Solutions:

$$1) \frac{4x+1}{-3x+1}$$

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

$$3) \frac{4x+3y}{4y-3x}$$

$$4) \frac{x+y}{xy^2}$$

$$5) \frac{a^2(b-3)}{b^2(a-1)}$$

$$6) \frac{1}{a^2b^2(a-b)}$$

$$7) \frac{x^2+1}{x}$$

$$8) \frac{y-3}{y+5}$$

$$9) \frac{x+1}{-x+1}$$

$$10) \frac{-5x+5y+10}{6x+12}$$

Challenge:

$$\frac{5x+3}{3x+2}$$