

WORKSHEET FOR INSTRUCTOR

ADDITION AND SUBTRACTION OF RATIONAL FUNCTIONS

Simplify:

$$1) \quad \frac{6}{x-3} - \frac{x}{x-3}$$

$$2) \quad \frac{x}{x^2-x-6} + \frac{2}{x^2-x-6}$$

$$3) \quad \frac{5}{8u^3} + \frac{8}{7u^5}$$

$$4) \quad \frac{3a+2}{5} - \frac{a}{2}$$

$$5) \quad \frac{x-1}{4x} - \frac{2x^2+3}{x^2}$$

$$6) \quad \frac{5m-2n}{nm^2} - \frac{2n-5m}{n^2m}$$

$$7) \quad 2 - \frac{4}{x^2-x-2}$$

$$8) \quad \frac{x-y}{4xy^2} - \frac{x+y}{x^2}$$

$$9) \quad \frac{5x}{3x^2+9} + \frac{4}{x^2+3}$$

$$10) \quad \frac{5}{3x-2} - \frac{4}{9x^2-4}$$

$$11) \quad \frac{s}{s-2t} - \frac{t}{s+2t}$$

$$12) \quad \frac{x+3}{x^2+5x+6} - \frac{1}{x+2}$$

$$13) \quad \frac{2r}{r^2-s^2} + \frac{1}{r+s} - \frac{1}{r-s}$$

$$14) \quad \frac{2}{x^2-4x+3} + \frac{4}{x^2+4x-5}$$

$$15) \quad \frac{5x}{x^2-x-6} - \frac{18}{x^2-9}$$

