

## Notes/Assignment 4.8

1. 
$$\frac{2}{x+4} - \frac{1}{x} = \frac{2}{3x}$$

2. 
$$\frac{2x-3}{x+1} = \frac{x+6}{x-2}$$

3. 
$$x + \frac{20}{x-4} = \frac{5x}{x-4} - 2$$

4. 
$$\frac{x}{x+3} - \frac{4}{x-2} = \frac{-5x^2}{x^2+x-6}$$

5. 
$$\frac{1}{6x^2} = \frac{1}{3x^2} - \frac{1}{x}$$

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

$$7. \quad \frac{1}{6x^2} + \frac{1}{6x} = \frac{1}{x^2}$$

$$8. \quad \frac{x+6}{x^2} + \frac{3}{2x^2} = \frac{x+4}{2x^2}$$

$$9. \quad \frac{1}{x} = \frac{6}{5x} + 1$$

$$10. \quad \frac{1}{6x^2} = \frac{1}{2x} + \frac{7}{6x^2}$$

$$11. \quad \frac{1}{x} + \frac{3x+12}{x^2-5x} = \frac{7x-56}{x^2-5x}$$

$$12. \quad \frac{1}{x^2-x} - \frac{1}{x} = \frac{5}{x^2-x}$$

$$13. \quad \frac{1}{x-8} + 1 = \frac{7}{x-8}$$

$$14. \quad \frac{x+5}{x^2-2x} - 1 = \frac{1}{x^2-2x}$$

$$15. \quad 1 = \frac{x+2}{x-4} + \frac{7x-42}{x-4}$$

$$16. \quad \frac{x-4}{5x} = \frac{1}{5x} - 1$$

$$17. \quad 1 + \frac{x^2-5x-24}{3x} = \frac{x-6}{3x}$$

$$18. \quad 1 = \frac{1}{x^2+2x} + \frac{x-1}{x}$$

Review:

$$19. \quad \frac{1}{x^2+x} - \frac{x-6}{x+1}$$

$$20. \quad \frac{1}{x-2} + \frac{1}{x^2-7x+10}$$

$$21. \quad \frac{3y+15}{y^7} \div \frac{y+5}{y^7}$$

$$22. \quad \frac{x^2-10x+21}{x-7} \cdot \frac{x^2+x-12}{(x-3)^2}$$

$$23. \quad \frac{2x^2y}{3z^2} \cdot \frac{12xz^4}{6y^3}$$

$$24. \quad \frac{x^2-10x+9}{x^2-1} \div \frac{x^2-5x-36}{x+4}$$