Chapter 8 Review

The exam will be shorter than this. **Simplify**

1. $\dfrac{a^2-a}{10a-10}$

2. $\dfrac{b^2+2b-15}{b^2-10b+21}$

3. $\dfrac{5ab+25b}{a^2-25}$

4. $\dfrac{4x^3y^2}{z^3}\cdot\dfrac{y^3z^4}{2x^5}$

5. $\dfrac{2v}{v+7}\cdot\dfrac{v^2+11v+28}{8v^2}$

6. $\dfrac{z^2+5z-14}{z^2-8z+12}\cdot\dfrac{z^2+z-42}{z^2+9z+14}$

7. $\dfrac{3x-12}{x^2-9x+20}\div\dfrac{9x+4}{x^2+x-30}$

8. $\dfrac{x^2-7x-8}{x^2-2x-48}\div\dfrac{6x^2+6x}{x^2+7x+6}$

9. $\dfrac{x^2-2x}{4y}\cdot\dfrac{28xy^2}{3x-6}\div\dfrac{2x^2+2x}{21x^2y^2}$

10. $\dfrac{3t+4}{t^2+10t+25}-\dfrac{2t-1}{t^2+10t+25}$

11. $\dfrac{3x-24y}{x+7y}-\dfrac{6x-3y}{x+7y}$

12. $\dfrac{2x+9}{7x-8}-\dfrac{7x-6}{8-7x}$

13. $\dfrac{3}{5c^3d^2}-\dfrac{4}{15c^2d^4}$

14. $\dfrac{2x+1}{3(2x-1)}-\dfrac{2-3x}{2(1-2x)}$

15. $\dfrac{1}{x-5}-\dfrac{1}{x-7}$

16. $\dfrac{x-3}{2x+6}-\dfrac{x-3}{x^2+6x+9}$

17. $\dfrac{x}{x^2-4x-12}+\dfrac{9}{x^2-15x+54}$

18. $\dfrac{7}{x^2+15x+56}+\dfrac{1}{x^2-64}$

19. $\dfrac{x}{x+3}-\dfrac{18}{x^2-9}$

20. $\dfrac{x}{x^2+4x+3}-\dfrac{3}{x^2-4x-5}$

Solve for the given variable

21. $\dfrac{2}{t-5}+\dfrac{3}{3+5}=\dfrac{10}{t^2-25}$

22. $\dfrac{1}{x+3}+\dfrac{21}{(x+3)^2}=2$

23. $\dfrac{8}{q-3}+\dfrac{9}{q^2-11q+24}=\dfrac{2}{q-8}$

24. $\dfrac{6}{z-5}+\dfrac{6}{z^2-11z+30}=\dfrac{2}{z-6}$

Included will be one from the HW of 8.4 and 8.6.