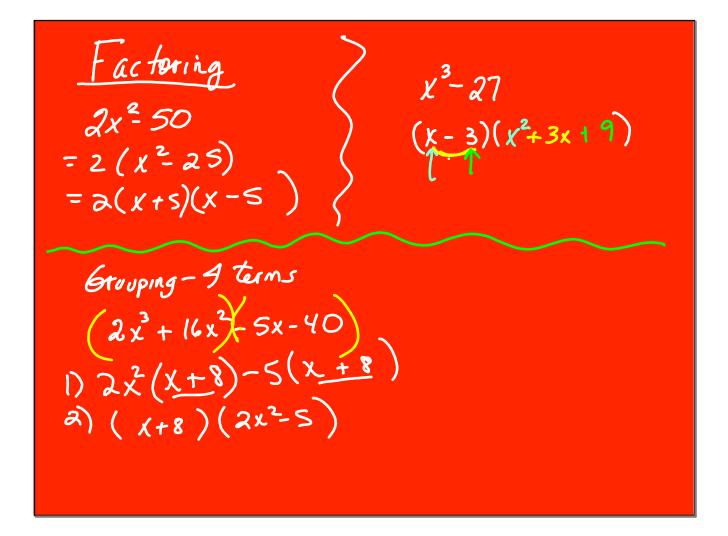
RATIONAL FUNCTIONS REVIEW

Sint (-3) 
$$\# + = (2 \text{ problems})$$
  
factor + cancel  
(1 problem)  $\frac{1}{x^{2} \cdot 7x + 3} + \frac{4}{x^{2} + 4}$   
1) factor denons  
2) Make + Keep common denoms,  
2-8) Complex fractions (1 problem)  $\frac{2}{x + 3} + \frac{4}{x + 5}$   
1) Make c.d. for top  
1 add to make one fraction  $\frac{1}{x - \frac{2}{x + 3}}$   
2) Bottom fractions - Do same  
3) Keep - Change flip  
4) factor + cancel  
Solve.  
9-12) 2 problems  
1) Factor denoms  
2) Multiply by c.d. to cancel all  
B-14) DIR [T Problems (1 problem)  
15) 3 graphs



$$Simplify \frac{m^{2} + n^{2}}{m^{2} - n^{2}} + \frac{m}{n - m} + \frac{n}{m + n}$$

$$\frac{m^{2} + n^{2}}{(m + n)(m - n)} + \frac{-m(m + n)}{(m - n)(m + m)} + \frac{n(m - n)}{(m + n)(m - n)}$$

$$\frac{m^{2} + n^{2} - m^{2} - mn + mn - m^{2}}{(m + n)(m - n)}$$

$$= 0$$

