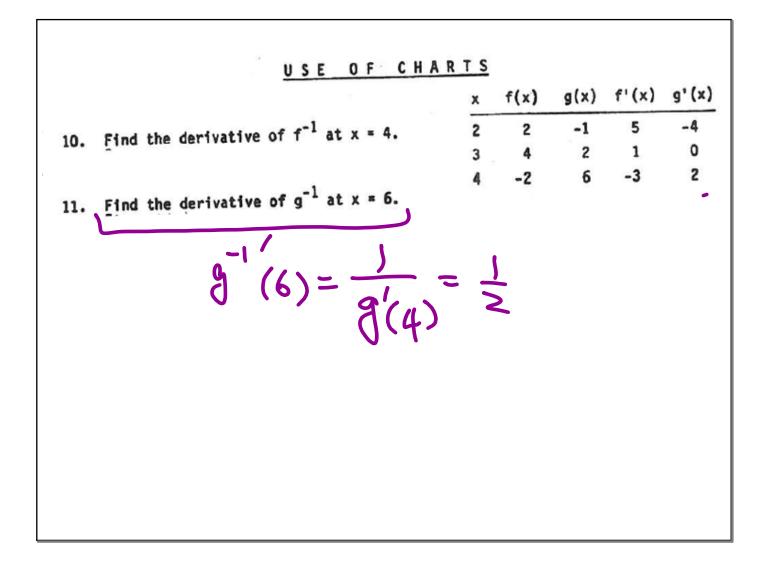
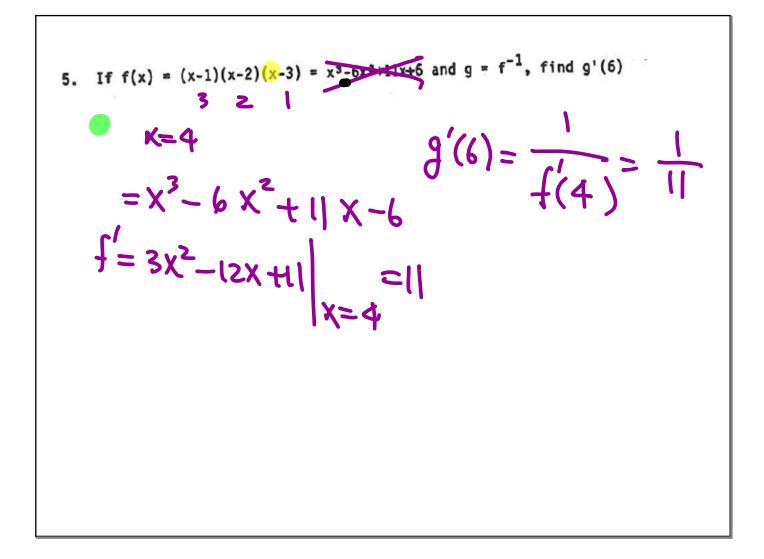
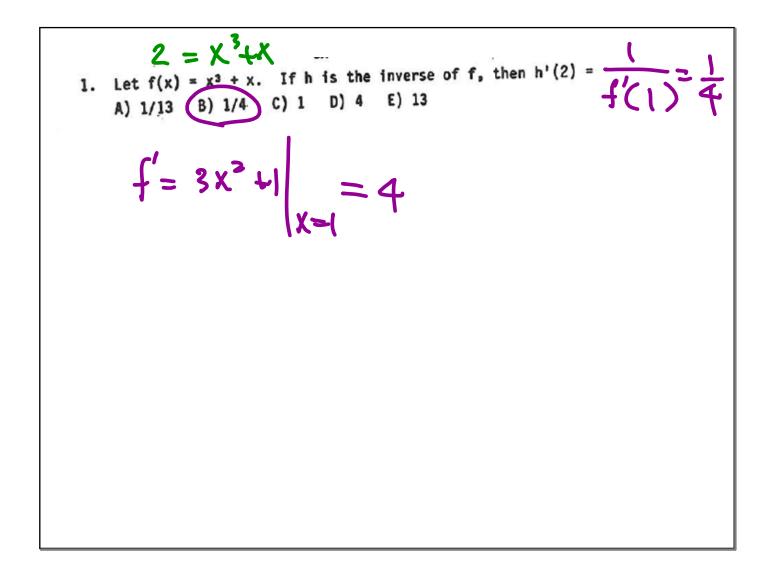
8. If 
$$f(x) = (x-2)\sqrt{x+1}$$
. Let g be the inverse of f. Find  $g'(\underline{18})$ .  
 $18 = (x-2)\sqrt{x+1}$ 
 $g'(c_18) = \frac{1}{f'(8)} = \frac{1}{4}$ 
 $g' = (8-2)\sqrt{8+1}$ 
 $f' = \sqrt{x+1} + (x-2) \cdot \frac{1}{2\sqrt{x+1}}$ 
 $g' = 3 + 6 \cdot \frac{1}{2\sqrt{3}} = 4$ 
 $X = 8$ 







6. If 
$$f(x) = 5x^{2} + 1$$
 for  $x \ge 0$ , and  $g = f^{-1}$ , find  $g'(11) = \frac{1}{f'(\sqrt{2})} = \frac{1}{10(\sqrt{2})}$   
 $|1| = 5\chi^{2} + 1$   
 $|0 = 5\chi^{2}$   
 $2 = \chi^{2}$   
 $\pm \sqrt{2} = \chi \longrightarrow \chi = \sqrt{2}$ 

