

# #7

Test 3 12, 15, 18-23

Test 2 34, 35  
calc!

12. 43000 hundreds  
= 4300000 (2)  
 $e^{-.25} = .975$   
decrease 2.5%

15.  $\frac{3000}{25} = \frac{25(2)^{4x}}{25}$   
 $120 = 2^{4x}$   
 $\frac{\log 120}{4 \log 2} = 7x \log 2$   
 $1.72 \approx 2$  (1)

18.

	$x + 4$		
$x$	$x^2$	$4x$	
$-7$	$-7x$	$-28$	(2)

19.  $11.90 + 4.3 \ln x = 9.17 (1.109)^x$   
Graph!  
 $(7.9, 20.7) \approx 8$   
(2)

20. Remainder Theorem!  
 $f(2) = -5$   
(1)

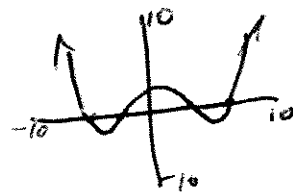
21.  $(2+i)^3 = 2+11i = (1)$

$(2+i)(2+i)$   
 $4+4i+i^2 \rightarrow (2+i)(3+4i)$   
 $6+11i+4i^2$

22.  $a_0 = 6000, r = 12$   
 $a_0 = 6000, a_n = a_{n-1} \left(1 + \frac{.03}{12}\right)^{12}$

23.  $y = -2x + 5$   
 $x = -2y + 5$   
 $\frac{x-5}{-2} = \frac{-2y}{-2}$   
 $g(x) = y = -\frac{x}{2} + \frac{5}{2}$  (1)

34.  $x^4 - 25x^2 + 144$   
 $(x^2 - 9)(x^2 - 16)$   
 $(x+3)(x-3)(x+4)(x-4)$



35.  $g(x) = f(x-2) - 3$   
2 right, 3 down  
 $g(x)$  is all  $4/c$  if reflect over origin