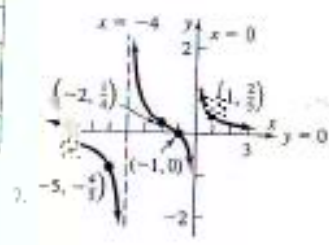


MATH-141-PRECALCULUS. Fall 2007

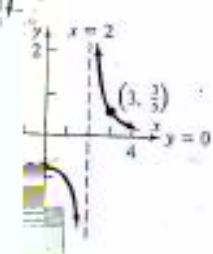
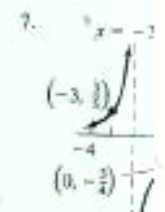
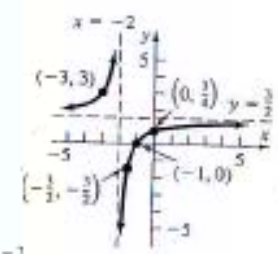
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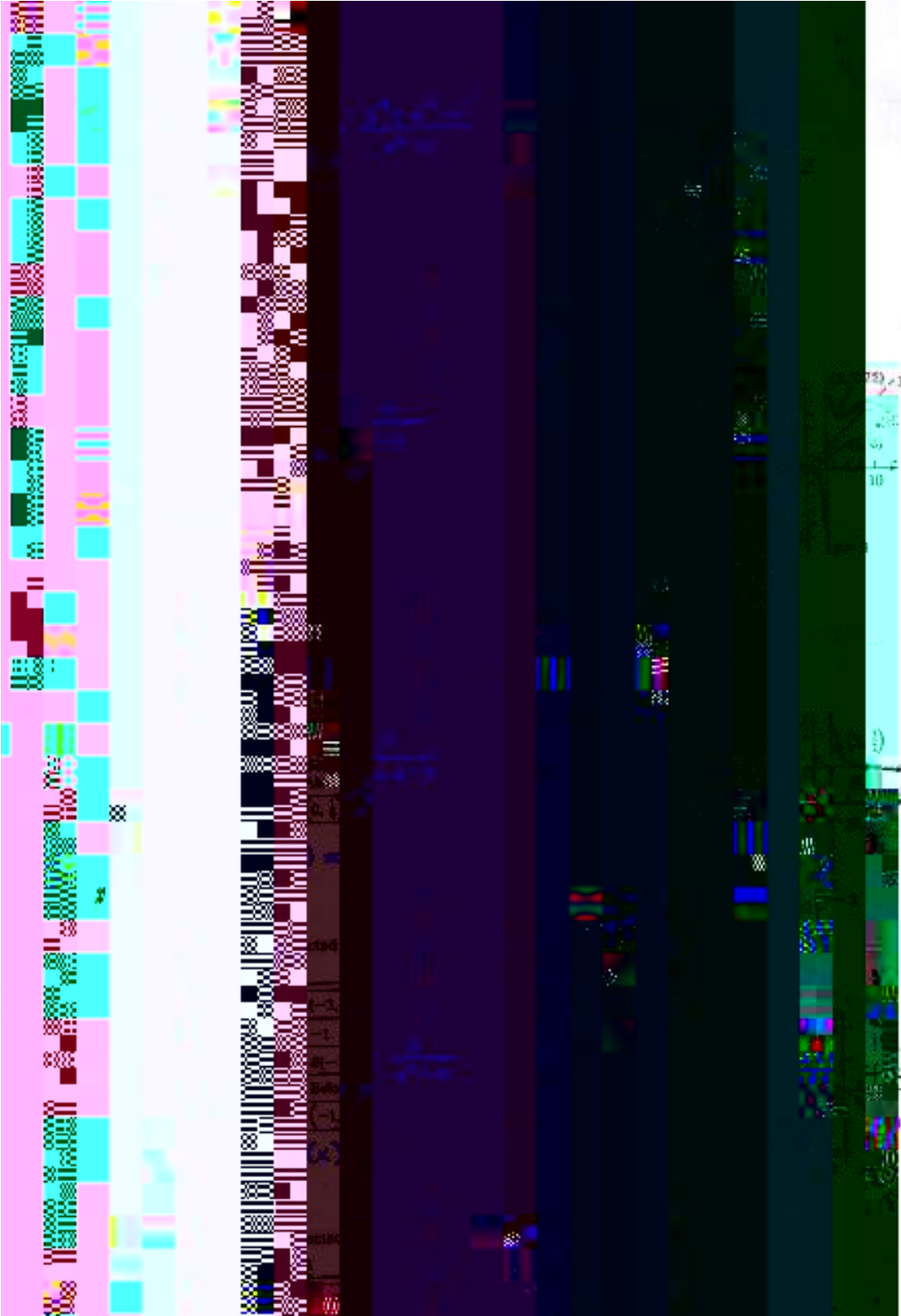
$\frac{1}{x^2 - 4}$   
 $\frac{1}{(x-2)(x+2)}$   
 $\frac{A}{x-2} + \frac{B}{x+2}$   
 $1 = A(x+2) + B(x-2)$   
 $1 = Ax + 2A + Bx - 2B$   
 $1 = (A+B)x + (2A-2B)$   
 $0 = A+B$   
 $1 = 2A-2B$   
 $A = -B$   
 $1 = 2A - 2(-A) = 4A$   
 $A = \frac{1}{4}$   
 $B = -\frac{1}{4}$   
 $\frac{1}{x^2 - 4} = \frac{1}{4} \left( \frac{1}{x-2} - \frac{1}{x+2} \right)$

0	
$(0, \infty)$	
1	
$f(1) = \frac{1}{3}$	
Solve x-axis	
$(-2, \frac{1}{3})$	
$(-1, 0)$	
$(-5, -\frac{1}{4})$	



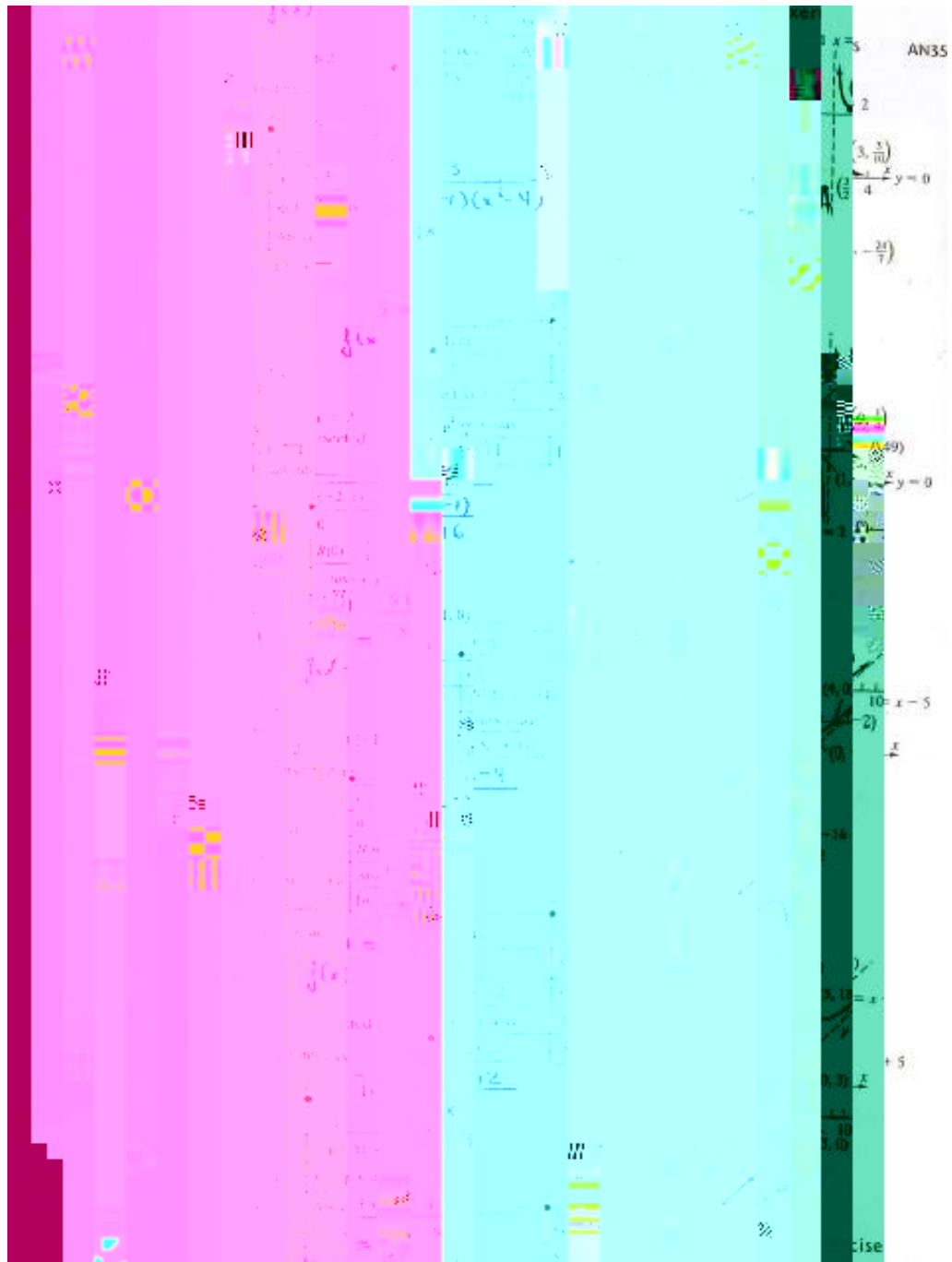
$\frac{1}{x^2 - 4}$   
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 $A = -B$   
 $1 = 2A - 2(-A) = 4A$   
 $A = \frac{1}{4}$   
 $B = -\frac{1}{4}$





$$y = x$$

$$x + y = 0$$



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Above

(-

$f(x) = \frac{x^2 - 13x + 4}{3}$

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-3

(-

-3, 0)

-1

R(-1)

Below

(-

-1, -

0

(0, 0)

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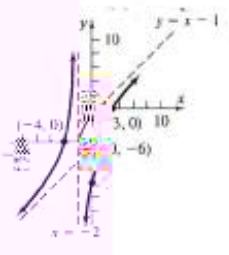
Enlar

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3	(3, ∞)
4	
-6	$F(4) = \frac{4}{3}$
Above	Above x-axis
(-	$(4, \frac{4}{3})$



1	(1, ∞)
2	
0.003	$R(2) = 0.016$
Above	Above x-axis
(-	(2, 0.016)



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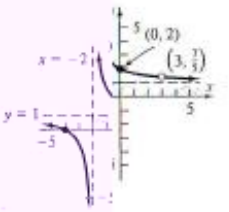
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7.



3	(3, ∞)
4	
	$R(4) = \frac{4}{3}$
Above	Above x-axis
(-	$(4, \frac{4}{3})$