

Day	Warm Up	General Activities
Fri (Last week)	Immediately either begin Friday's assignment or take retest	(Students taking the retest are still responsible for Friday's assignment, but will have to do it over the weekend)
		<ol style="list-style-type: none"> 1. Read carefully section 5.8 – as with any math reading this will require great concentration and you may need to reread it or put examples in notes. 2. Memorize Thm 5-18 3. Copy examples 4 and 5 into notes 4. P 386 #41-55 odd
Mon	<p>Check of homework P 378 #55-68, 103 P 386 #41-55 odd</p>	<p>Problems with problems???</p> <p>Discuss diff. of and integration of inverse trig functions and memorize everything that you have yet to memorize that you need to!!!!!!!!!!!! (see P 391)</p>
Tue	<p>Check homework</p> <p>Quiz – have you memorized this stuff yet???</p> <p>Class avg of 90% on this quiz means no AP Calc over Easter break</p>	
		Discuss integration
		Practice: P 393 #1-10

→ EVENS ON SHEETS AND UP HERE IN A SEC.

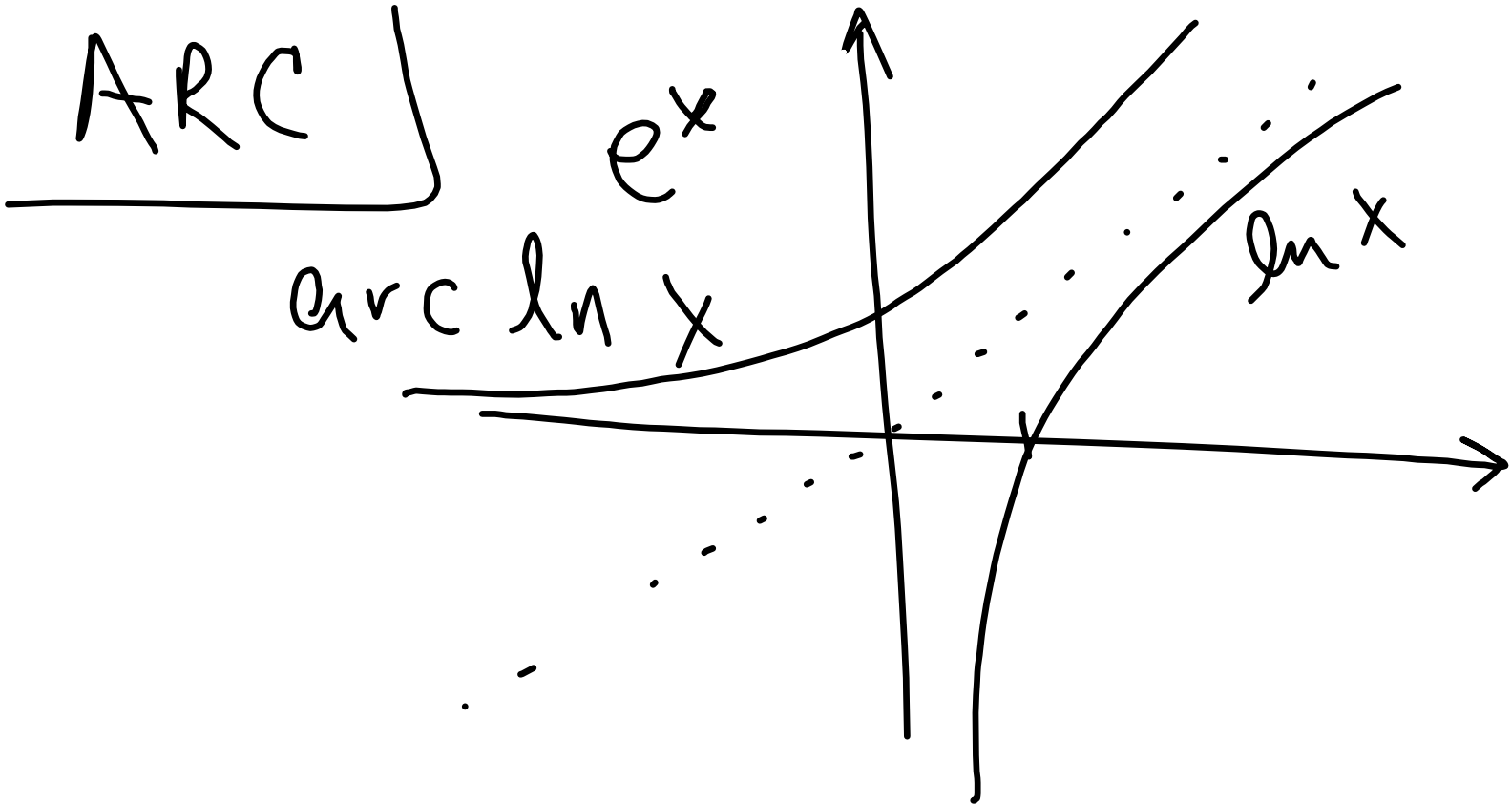
$$(41) f(x) = 2 \arcsin(x-1)$$

$$\begin{aligned} f'(x) &= \frac{2}{\sqrt{1 - (x-1)^2}} \\ &= \frac{2}{\sqrt{1 - (x^2 - 2x + 1)}} \\ &= \frac{2}{\sqrt{2x - x^2}} \end{aligned}$$

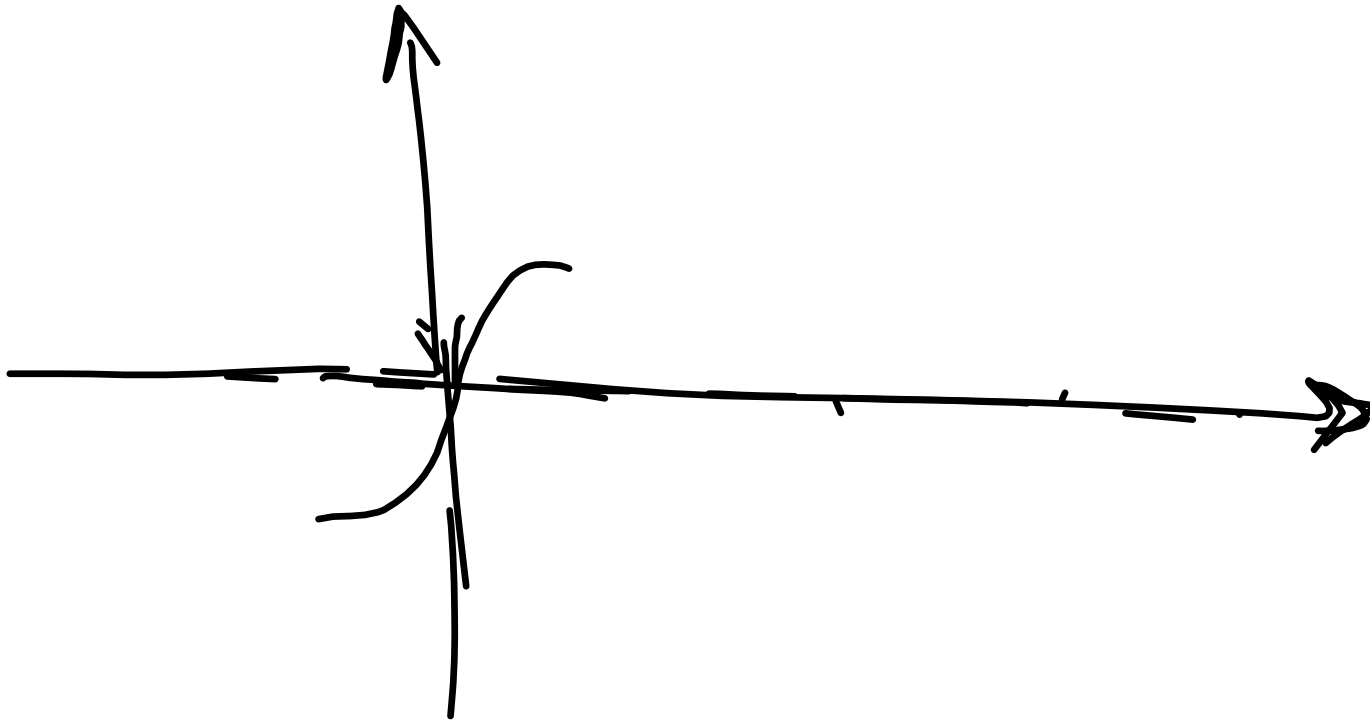
$$f(x) = \frac{1}{2} \left(\frac{1}{2} \ln \frac{x+1}{x-1} + \arctan x \right)$$

$$= \frac{1}{4} \ln \frac{x+1}{x-1} + \frac{1}{2} \arctan x$$

$$\ln \left(\frac{x+1}{x-1} \right)^{\frac{1}{4}} \quad \downarrow \quad \downarrow$$



ARCSIN X



P. 378

(# 59)

$$y(0) = \sqrt{3}$$

$$y(1+x^2)y' - x(1+y^2) = 0$$

$$\frac{dy}{dx} = \frac{x(1+y^2)}{y(1+x^2)} = \left(\frac{1+y^2}{y} \right) \left(\frac{x}{1+x^2} \right)$$
$$\int \left(\frac{y}{1+y^2} \right) dy = \int \left(\frac{x}{1+x^2} \right) dx$$

$$u = 1+y^2$$

$$\frac{1}{2} du = 2y dy$$

$$\frac{1}{2} du = y dy$$

