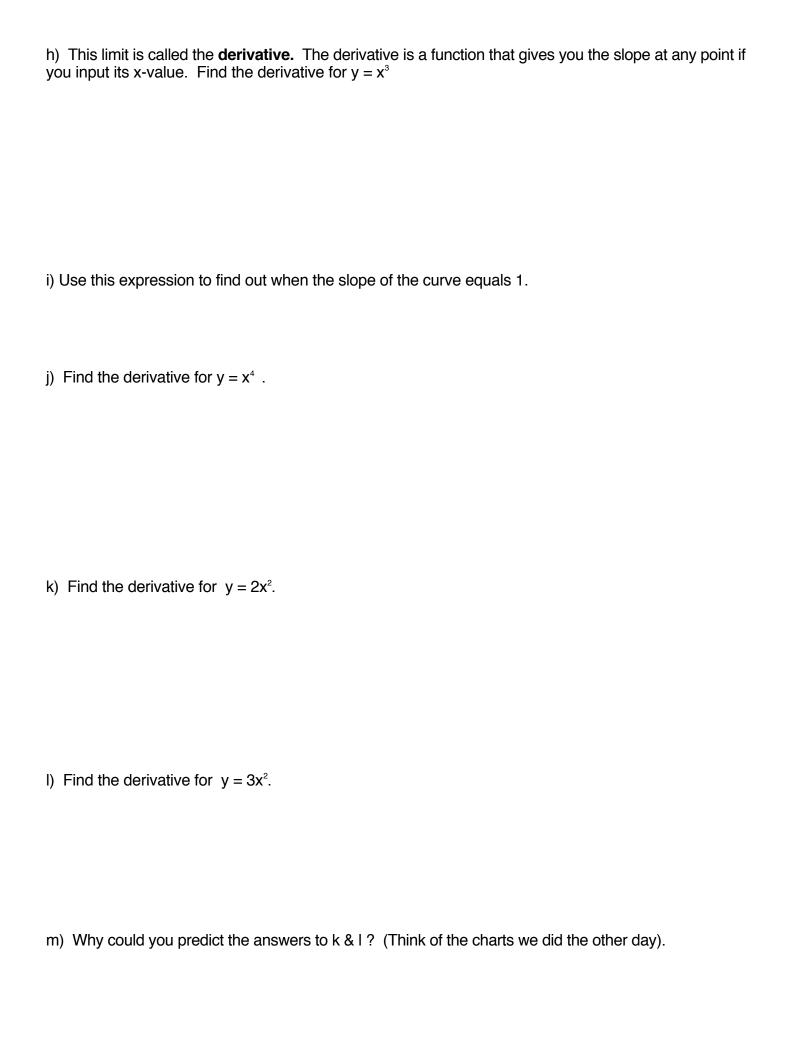
	me:				тс	
			Classv	vork 30		
	cking up where A bird is accele		The displaceme	nt of the bird ov	er time is described by $y = x^2$.	
Re nte	minder: On Fricerval was equal t	day, we proved the	hat under consta eous speed at e	int acceleration, exactly the middl	the average speed over any time e of the time period.	
a) Find the average speed of the bird between 5 seconds and 10 seconds.				b) At what time is the bird travelling exactly the speed in (a)?		
					terval, fill out this chart with the what we did on Friday)	
	interval	average speed	time at which it occurs	, ,		
	0 - 2 s					
	2 - 4 s					
	4 - 6 s					
	6 - 8 s					
	8 - 10 s					
	10 -12 s					
•	_	ule for the relation	onship between t	he instantaneou	s speed and the time at which it	
	curs.					
·) [How could we wi Remember, we	rite a limit expre want the change	ession for the ins e in x to approac	stantaneous spe h zero	eed (slope at the point) for any value	;
(First point: Second point:					

g) Use this expression to find the exact slope at exactly x = 10 and x = -10.



Practice Problems

- 1. Find the derivative of y = 2x. (Why do you know this answer already?)
- 2. Find the derivative of $y = 4x^2$.
- 3. Find the derivative of $y = x^5$.