AMS 361: Applied Calculus IV by Prof. Y. Deng

Short Test 1: 02/20/2018 Thursday 5:30p-6:50p ESS 001

(1) Closed Book with 1-page (double-sided 8.5x11) self-prepared hand-written.
(2) Do any two of the three problems.
(3) If all three are attempted, the best two (and only two) will be credited.
(4) Each problem is worth 7.5 points for a total of 15 points (max).
(5) No points for solutions without appropriate intermediate steps.
(6) Partial credits are given only for steps that are relevant to the solutions.
(7) No name, no grade and no request will be answered.
(8) No SBU ID card, no test.

SB ID		
Name		
Problems	Score	Remarks
T1-1		
T1-2		
T1-3		
Total Score		

T1-1 (7.5 Points): Find the GS of

$$3x^2(xy' - y) + (\sin x)y^4 = 0$$

T1-2 (7.5 Points): Find the GS of

$$y' + 4xy = 1 + 4x^2 + y^2$$

T1-3 (7.5 Points): Find the GS (with one given solution $y_1(\mathrm{x}) = x^2$) of

$$x^3y' = 2x^4 - x^2y + y^2$$