Math 151-01 Calculus I – Crawford

Books, notes (in any form), and calculators are not allowed. *Show all your work*. Good Luck! **1.** (4 pts) Find the critical numbers of the function.

 $f(t) = (t^2 - 9)^3$

2. (4 pts) Turn in Section 2.8, #17 by 3pm today. If you turn it in immediately after turning in this quiz, I'll give you 2 bonus points.

3. (7 pts) A street light is mounted at the top of a 15 ft tall pole. A 5 ft tall girl walks away from the pole with a speed of 4 ft/s along a straight path. How fast is the length of the shadow changing when she is 6 ft from the pole?

[Remember that significant partial credit will be given for clearly and accurately labeling the picture, and indicating values and equations in correct mathematical notation.]