Name: ______________________________________

Clear your desk of everything except pens, pencils and erasers. If you have a question raise your hand and I will come to you.

1. (2 points) **Multiple Choice. No work needed. No partial credit available.** A particle moves with position function \( s(t) = t^3 - t^2 - 21t \). What is its velocity at the point where its acceleration is zero?

   A. \(-\frac{565}{27}\)
   
   B. \(-\frac{64}{3}\)
   
   C. \(\frac{8}{3}\)
   
   D. \(\frac{8}{27}\)
   
   E. None of the above.

2. (1 point) **Fill-in-the-Blank. No work needed. No partial credit available.**

   The following is the graph of the derivative \( f'(x) \) of a function \( f(x) \). Is the original function \( f(x) \) increasing or decreasing at \( x = 4 \)? ________________.
3. (2 points) Find the tangent line to the curve $\sqrt{2(x + y)} = 1 + x^2y^2$ at the point (1, 1). Show your work.