Name: _____

Clear your desk of everything excepts 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. $-\frac{565}{27}$

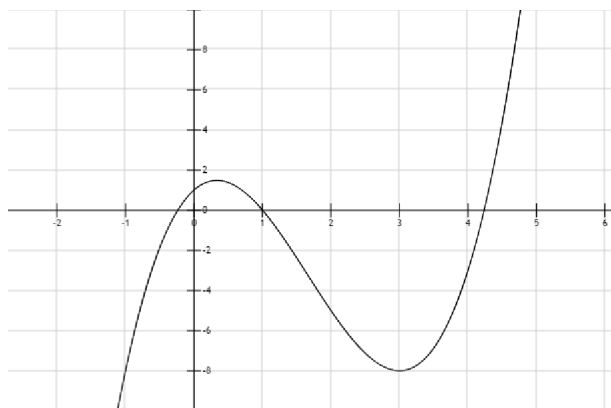   B. $-\frac{64}{3}$

   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 $x = 4$? _____.

Extra Work Space.

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.

$$\underline{}/\,5$$