

Correct. $\frac{-x^3 + 2x^2 + 3x}{3x^3 - 6x^2 - 9x} = \frac{-x(x+1)(x-3)}{3x(x+1)(x-3)}$, so the domain of the expression excludes $x = 0$, $x = -1$, and $x = 3$. Simplifying the expression, you find that $\frac{-x(x+1)(x-3)}{3x(x+1)(x-3)} = -\frac{1}{3}$.