PRINT your name:

Answer each question below completely. You must fully justify your answers to get credit. Even a correct answer with no justification is wrong.

1. Write a (geometric) power series which agrees with the function $\dfrac{1}{8+x^3}$ on the interval $-2 < x < 2$.

2. Write a power series representation of $\dfrac{3x^2}{(8+x^3)^2}$.

   Hint: the answer to the first question is relevant.