Place your name on the back of this sheet of paper and nowhere else. Staple your answers face up on the front of this sheet of paper. Failure to follow these directions will cost you 10 points. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

1) (15 points) Explain 
$$\frac{\Delta Y}{Y} = sA - d$$

- 2) (15 points) The "Inflation Reduction Act of 2022" did many things (including increasing inflation in the short-run). For ONE of the things it does, explain how that will affect the long-term growth of the economy using the exogenous growth theory. <a href="https://www.wri.org/update/brief-summary-climate-and-energy-provisions-inflation-reduction-act-2022">https://www.wri.org/update/brief-summary-climate-and-energy-provisions-inflation-reduction-act-2022</a>
- 3) (15 points) In the Exogenous Growth Model, the production function does not have labor in it. How can that be justified? Explain the logic.
- 4) (15 points each) President George W. Bush did several things that will have an impact on the long-run growth of the economy. For each of these, does that increase or decrease the long-run growth of the economy using the Exogenous Growth Model? Explain your logic.
- A) He cut personal income taxes on interest and dividends.
- B) He greatly increased government spending.
- C) He cut personal income taxes on capital gains.
- 5) (10 points) What is meant by *human capital*? How can the government increase it? Explain how that would work.