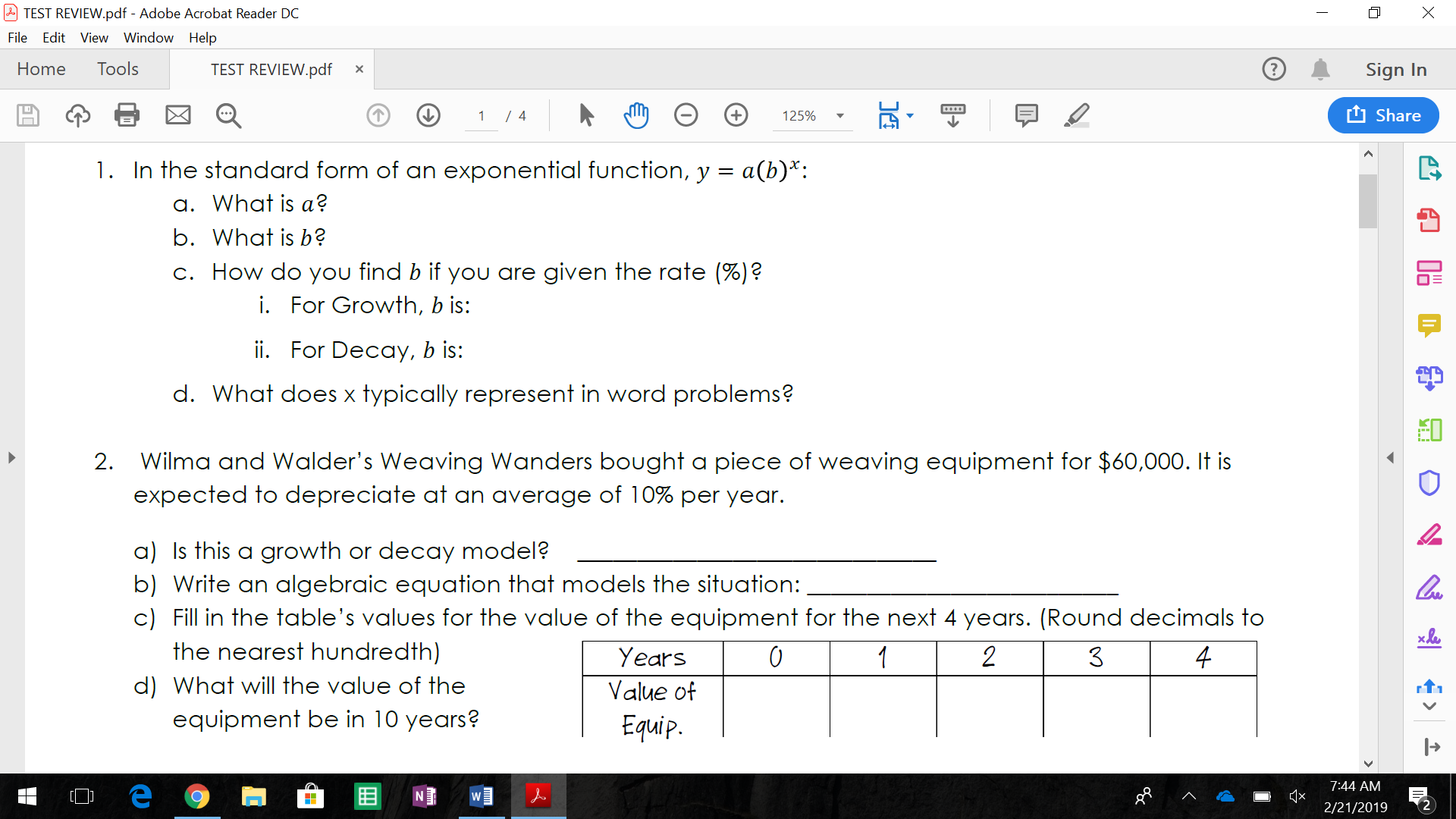
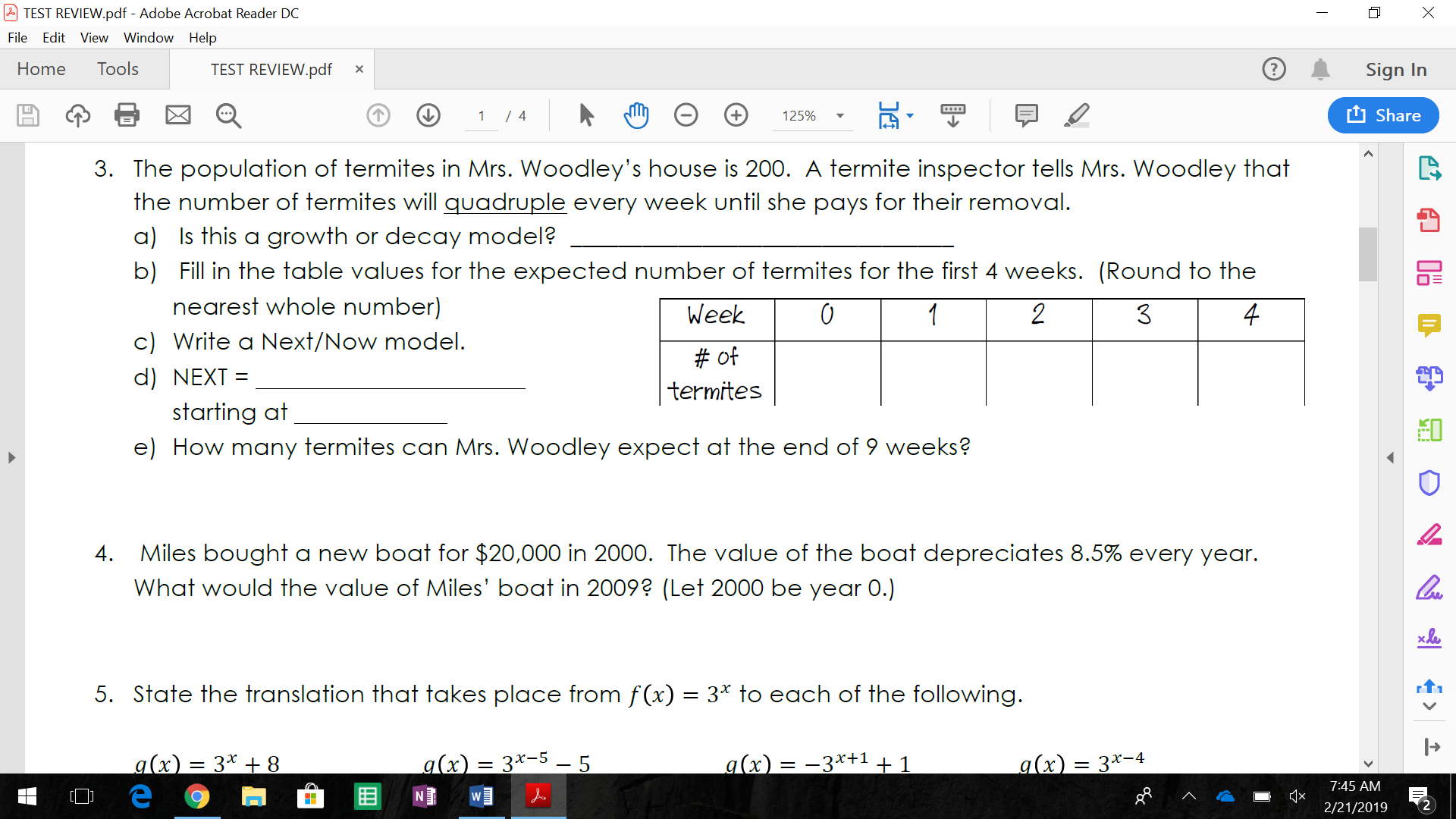
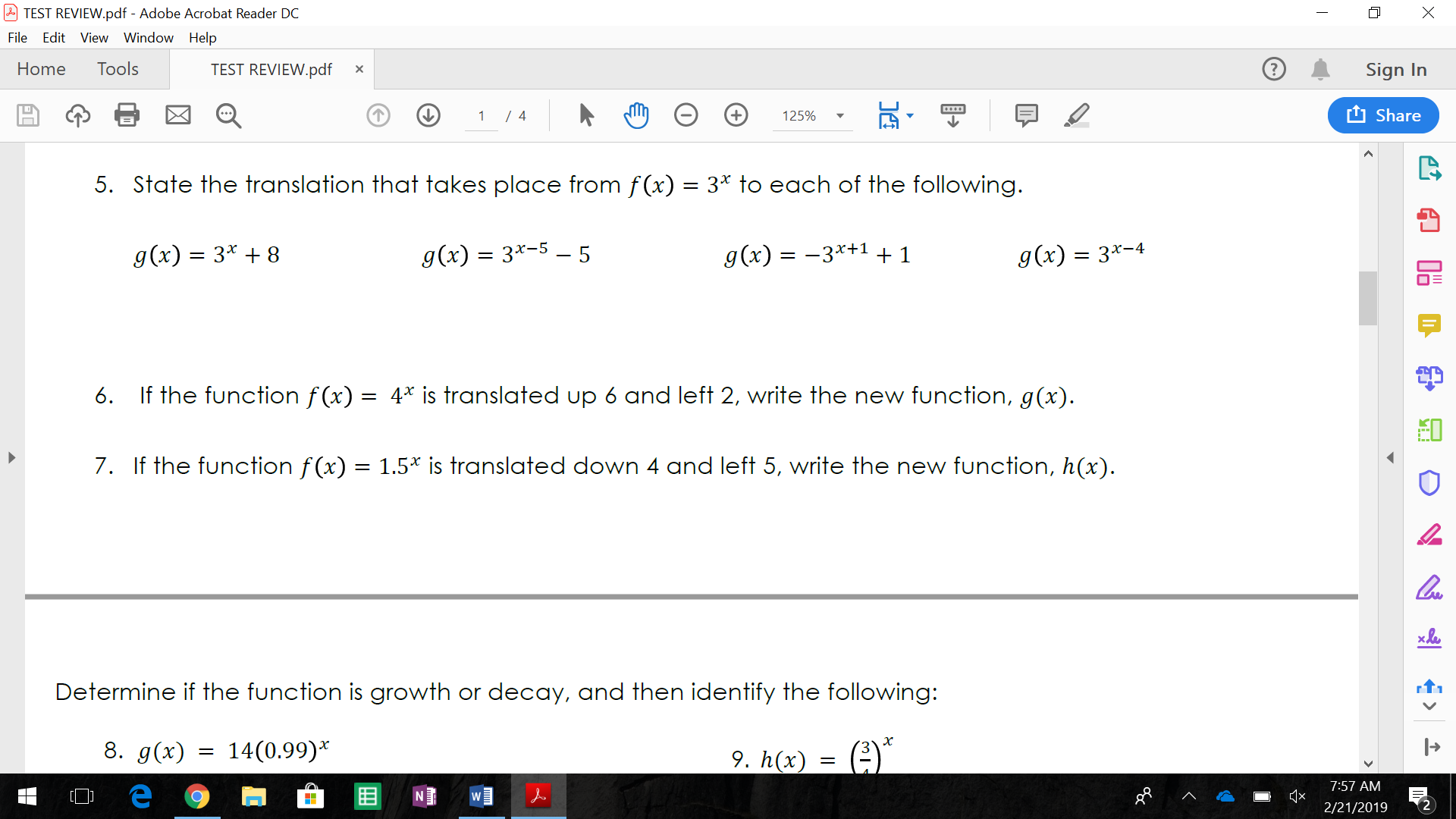
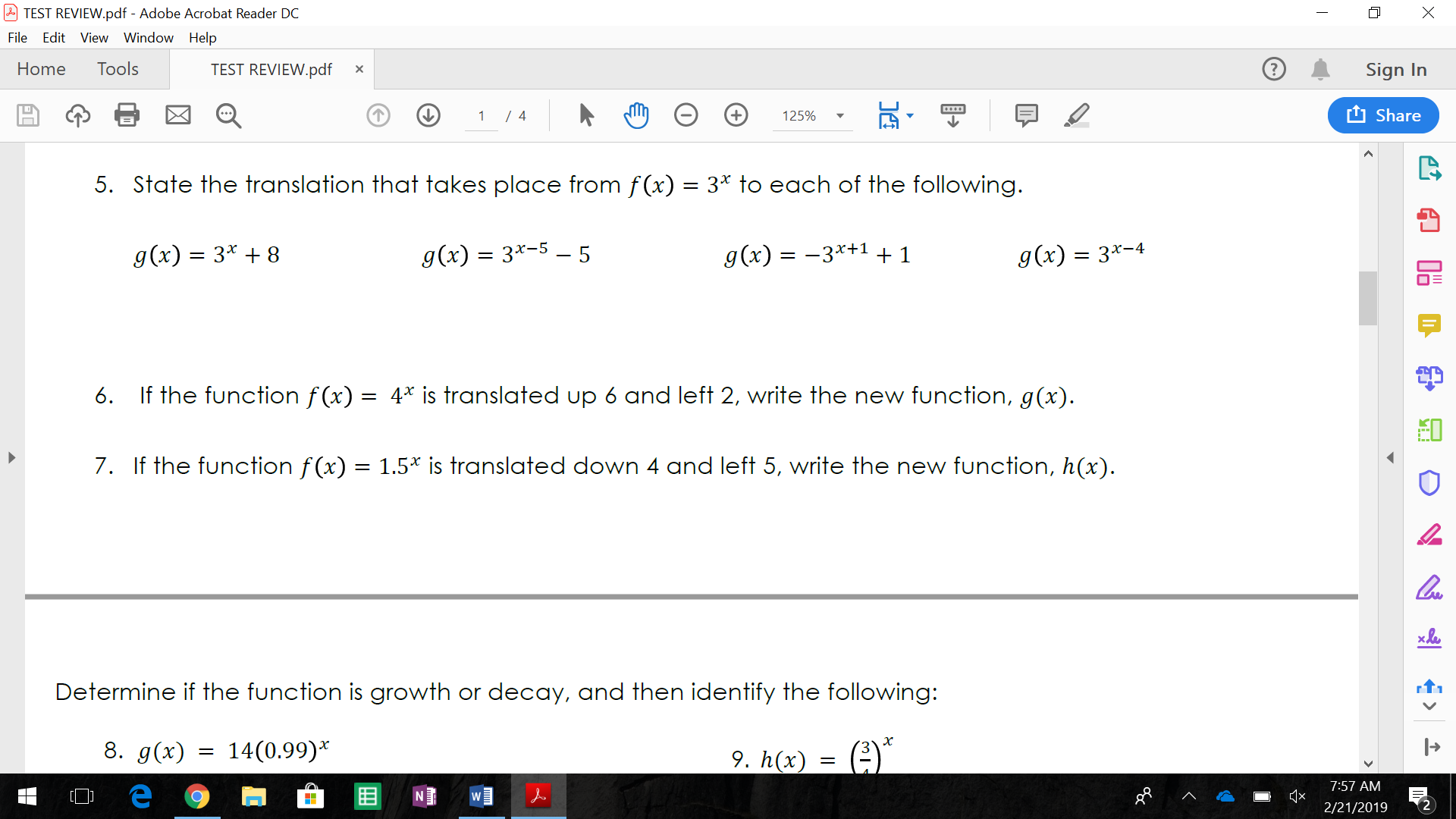
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

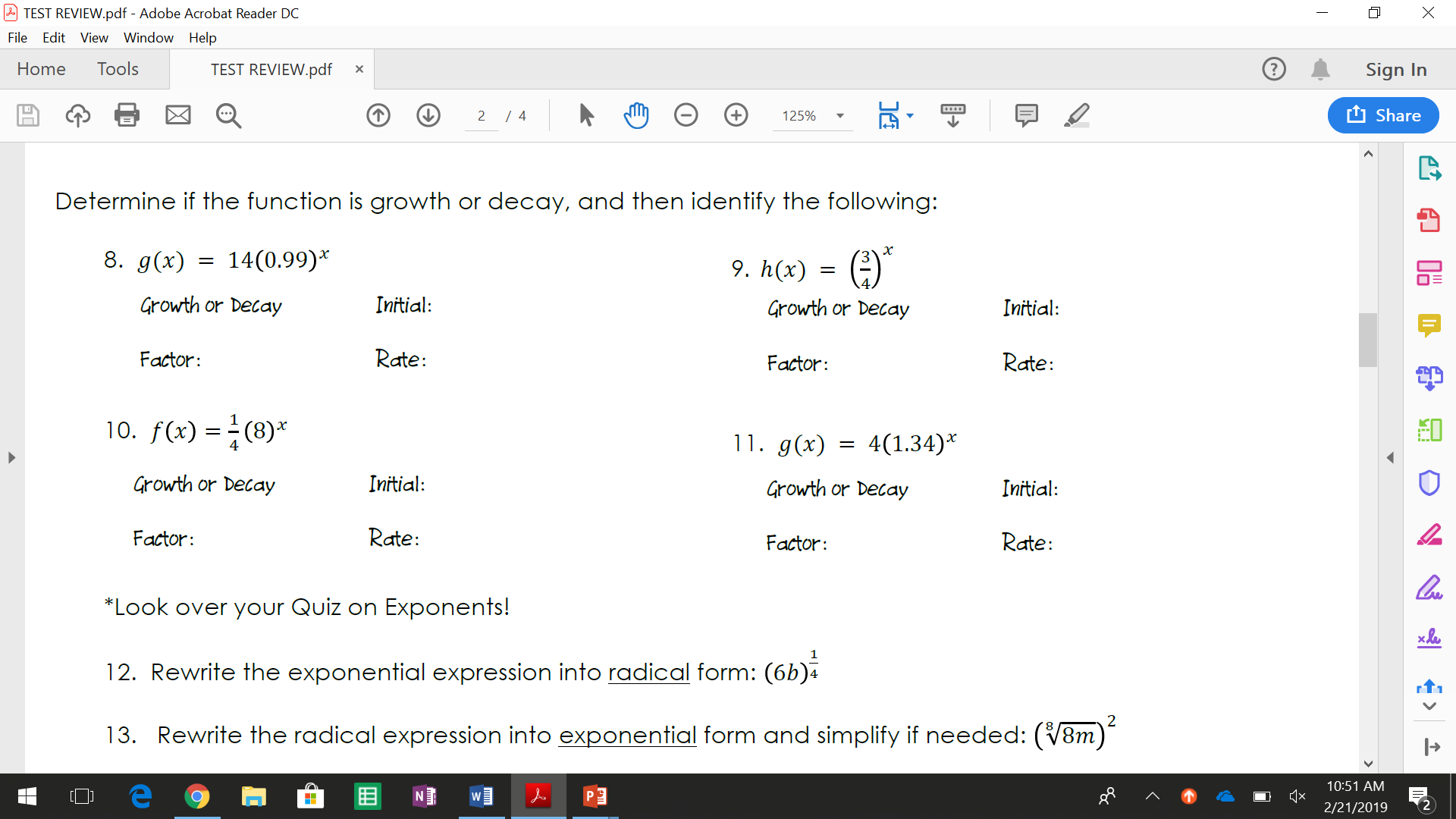
Unit 4: Exponential Functions Mock Test









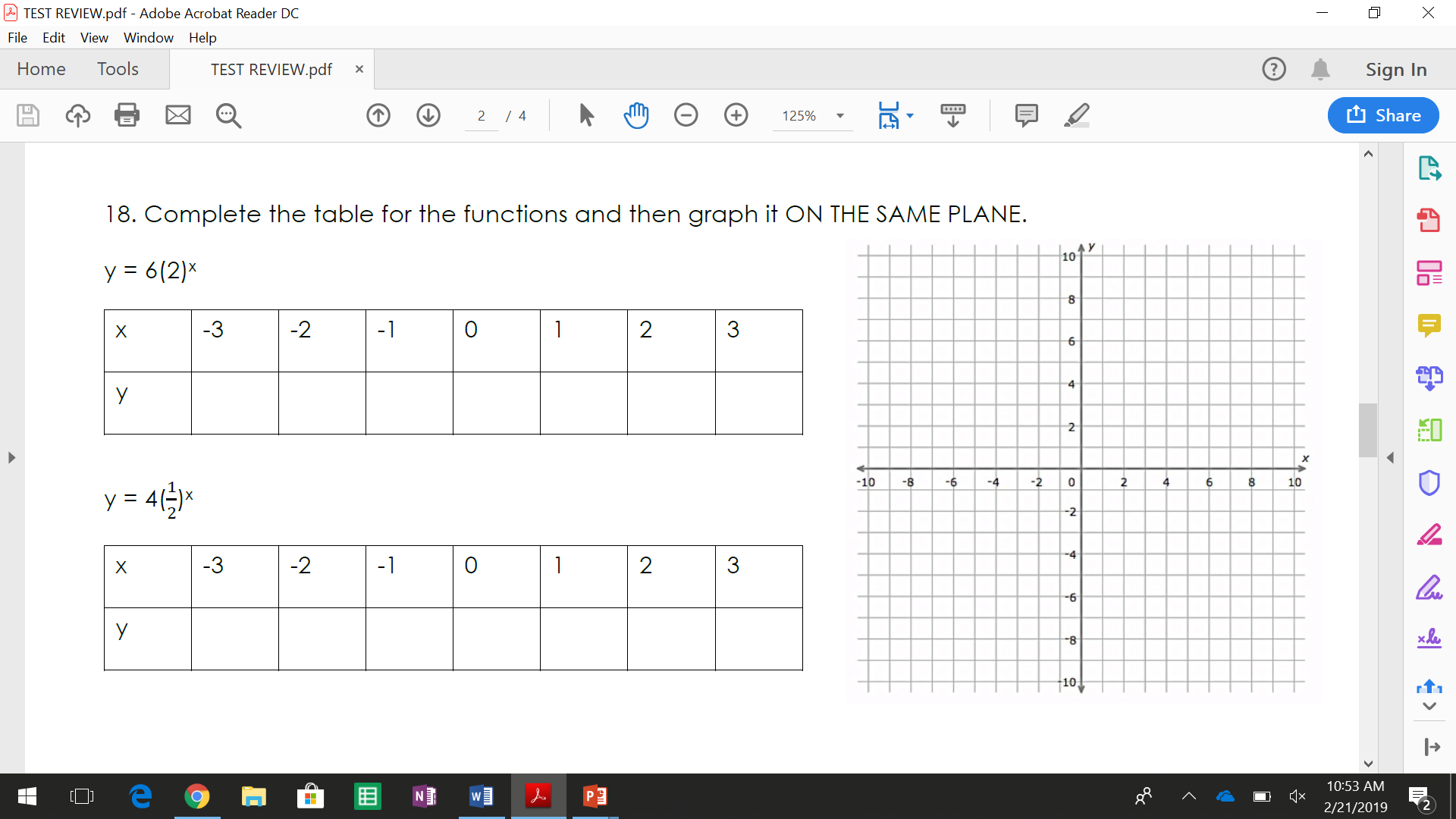


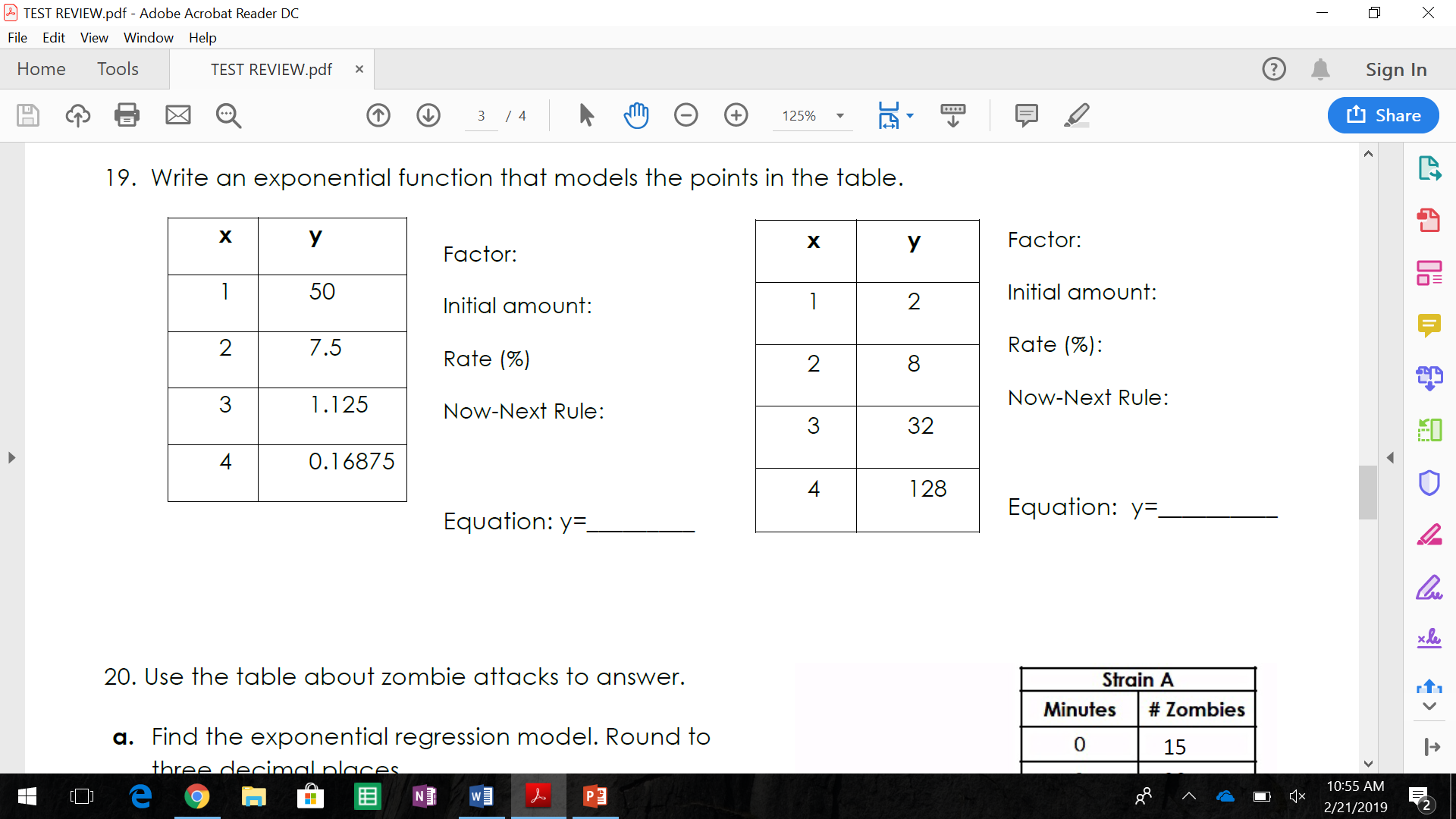
Solve the following Exponential Functions:

12. 13.

14. 15.

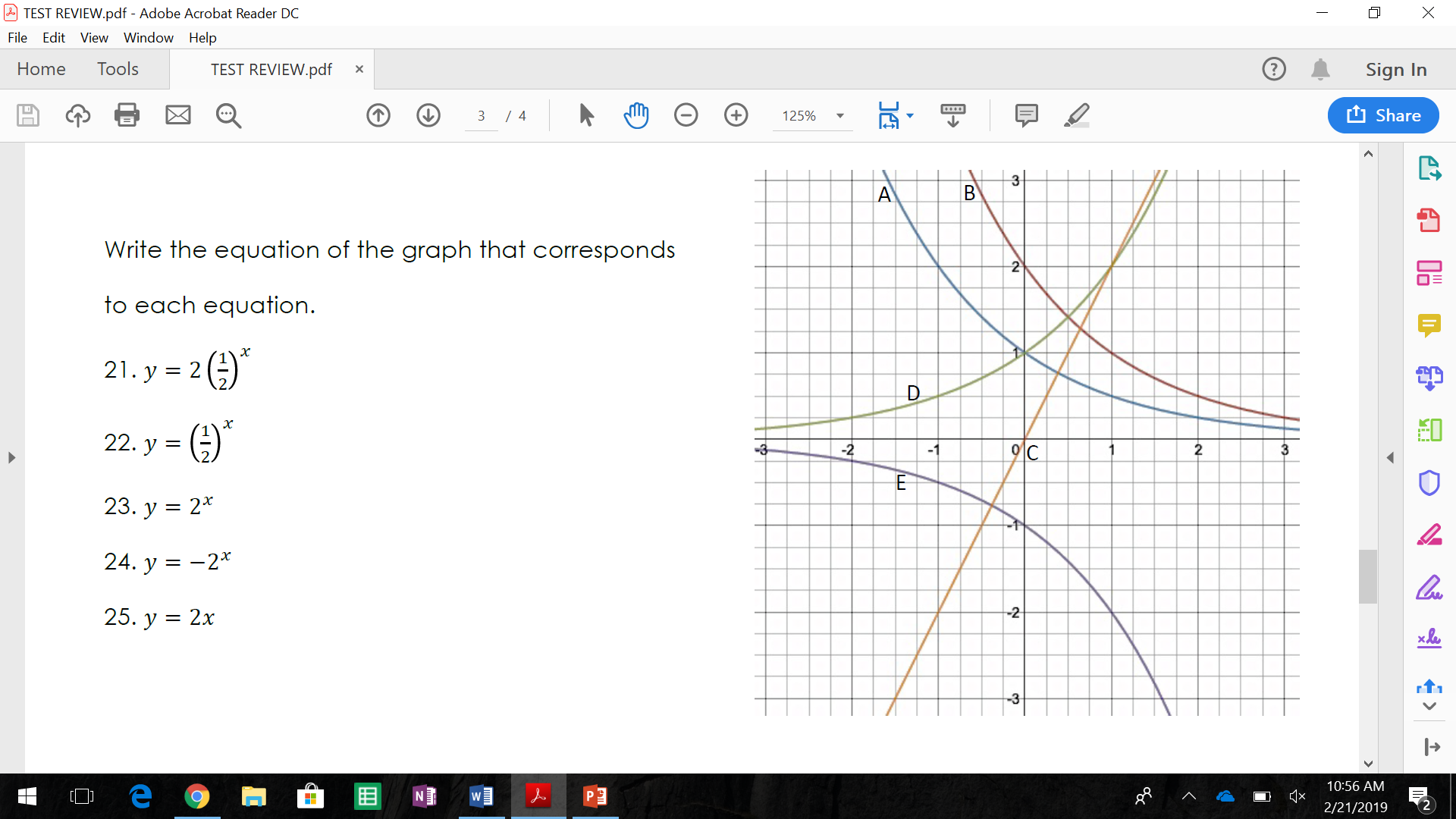
16. 17.





20. What is an **asymptote**, and how can you find the asymptote in **both** the parent function f(x) = bx and in the transformed function g(x) = abx-h + k?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



Answer the following about Geometric Sequences:

26. Find the formula for the nth term of the following geometric sequence: 3, 9, 27, 81, …

27. Find the formula for the nth term of the following geometric sequence: -2, 10, -50, 250, …

28. Lidia’s parents have offered her two different options to earn her allowance for a 9-week period over the summer. She can either get paid $30 each week, or $1the first week, $2 the second week, $4 the third week, and so on.

a) Clearly explain if the second option forms a geometric sequence or not.

b) Show work and explain which option Lidia should choose.

29. Find the common ratio for the following sequence, and then find the tenth term: 7, -7, 7, -7, …

30. The fourth term for a sequence is 54, and the common ratio is -3. Use the information to find the eighth term. (Hint: You will need to find A1 first.)