

Name \_\_\_\_\_

**7-7B Lesson Master****Questions on SPUR Objectives**

See pages 452–455 for objectives.

**SKILLS** Objective B

1. Dimitrios has saved \$21,000. He invests the money in a savings account that pays him 5% annual interest. To keep track of his savings, he wants to create a spreadsheet like the one below.

	A	B
1	Year	Money Saved
2	0	21,000
3	1	22,050
4	2	
5	3	
6	4	

- a. What formula can Dimitrios enter in cell B4 to find the amount of money after 2 years? \_\_\_\_\_
- b. Fill in the values in Column B.
- c. Explain what the value in cell B5 represents.  
\_\_\_\_\_
2. Penny has saved \$11,000. She invests half of the money in a savings account that pays her 6% annual interest and the other half in an account that pays her \$500 per year interest. To keep track of which method pays her more, she creates a spreadsheet like the one below.

	A	B	C
1	Year	6% Interest	\$500 Interest
2	0	5,500	5,500
3	1		
4	2		
5	3		
6	4		
7	5		

- a. Create an expression in terms of  $t$  years to describe each method of saving. \_\_\_\_\_
- b. Check the expressions by using a formula in the spreadsheet. Which method of savings has the highest balance after 5 years? \_\_\_\_\_

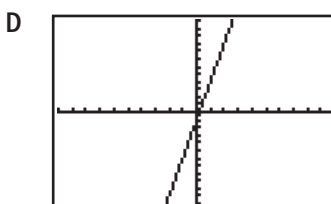
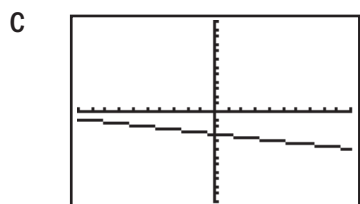
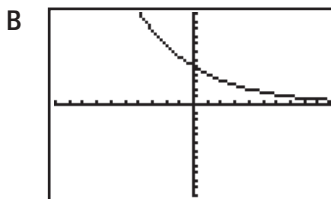
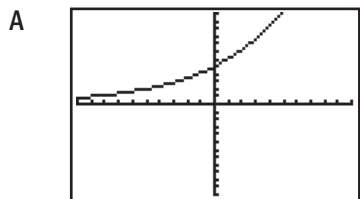
Name \_\_\_\_\_

**7-7B**

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**USES** Objective G

In 3-6, *multiple choice*. Each graph is drawn on the window  $-10 \leq x \leq 10$  and  $-12 \leq y \leq 12$ . Match each equation with its graph.



3.  $f(x) = 5x - 1$  \_\_\_\_\_

4.  $h(x) = 5 \cdot 1.2^x$  \_\_\_\_\_

5.  $k(x) = -0.2x - 3$  \_\_\_\_\_

6.  $h(x) = 5 \cdot 0.8^x$  \_\_\_\_\_

7. Two companies start out the year with \$200 in sales. Sales in company A increase by \$20 each week. Sales in company B increase by 10% each week. Fill in a spreadsheet like the one below to compare earnings.

	A	B	C
1	Week	Company A	Company B
2	5		
3	6		

a. What formula can you enter in B3 to display sales? \_\_\_\_\_

b. What formula can you enter in C3 to display sales? \_\_\_\_\_

c. Which company will have higher sales in 5 weeks? \_\_\_\_\_

d. Project the sales for Company B in the 10<sup>th</sup> week and then check your projection with the spreadsheet. Was your projection correct? Why or why not?

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