Name _____ Date _____ Class _____
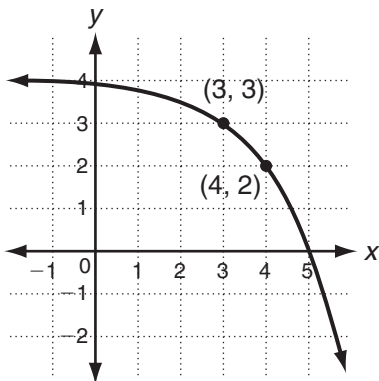
Quiz
Lessons 7-5 Through 7-8
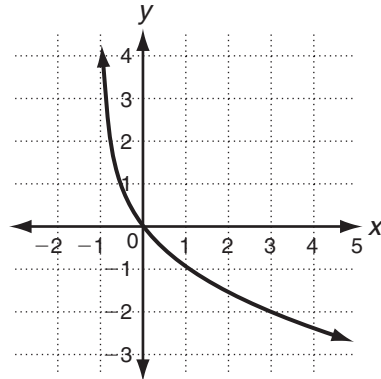
Select the best answer.

1. Solve $4^{x-4} = 0.5^{5-2x}$.

    A $x = 1$

    B $x = 2$

    C There is no solution.

2. Solve $5^{2x} = 20$.

    F $\dfrac{\log 10}{\log 25}$ **H** $\dfrac{2\log 20}{\log 5}$

    G $\dfrac{\log 20}{\log 25}$

3. What is the sum of the solutions of the equation $\log_2 (x + 2) + \log_2 (3 - x) = 2$?

    A -1 **C** 2

    B 1

4. Which of the following is equal to $2e^{2\ln 4} - \ln e^8$?

    F 8   **H** 24

    G 16

5. What could be the function shown in the graph?

    A $a(x) = \log_2 (x - 5) + 2$

    B $b(x) = -2^{x-3} + 4$

    C $d(x) = 2^{3-x} + 4$

6. What could be the function shown in the graph?

    F $f(x) = -\log_2 (x + 1)$

    G $g(x) = 2^{1-x} - 2$

    H $h(x) = -\log_2 (x) - 1$

7. If the data below is from an exponential function, what is the value of a?

x	2	3	a
y	4	6	13.5

    A 4   **C** 6

    B 5

8. What is the y-intercept of the function $f(x) = e^x + 7$?

    F $\ln (-7)$

    G 7

    H 8

9. The data below is from an exponential function. What is the value of the constant ratio?

x	-2	0	2	4	6
y	$\dfrac{1}{3}$	1	3	9	27

    A -3

    B -2

    C 3

Answer Key Algebra 2

CHAPTER 7

Section Quiz Lessons 7-5 Through 7-8

1. C   **6.** F

2. G   **7.** B

3. B   **8.** H

4. H   **9.** C

5. B