

"Tell the truth - all the time!"

Review Quiz Algebra 8R (Mazzeo 2013)**Multiple Choice***Identify the choice that best completes the statement or answers the question.*

- _____ 1. Which equation has a slope of -3 and passes through the point (4,0)?
A. $y = -3x + 4$ C. $y = 4x - 3$ E. $y = -4x + 3$
B. $y = -3x + 12$ D. $y = -3x - 12$ F. None of these
- _____ 2. Which is equivalent to $(-2e^2k^3)^3$?
A. $-6e^6k^9$ C. $-2e^6k^9$ E. $-8e^5k^6$
B. $-6e^5k^6$ D. $-8e^6k^9$ F. None of these
- _____ 3. Which equation models a population of 14,000 growing at a rate of 3% each year?
A. $y = 3 \cdot 14,000^x$ C. $y = 14,000(3)^x$ E. $y = 14,000(0.03)^x$
B. $y = 14,000(1.03)^x$ D. $y = 14,000(1.3)^x$ F. None of these
- _____ 4. What does $9w^2 - 36$ look like when completely factored?
A. $9w^2(1 - 4)$ C. $9(w^2 - 4)$ E. $(3w + 6)(3w - 6)$
B. $9(w + 2)(w - 2)$ D. $(9w - 4)(w + 9)$ F. None of these
- _____ 5. Where does the graph of $y = x^2 - 3x - 18$ cross the x-axis?
A. -18 and 3 C. -3 and 18 E. -6 and 3
B. -9 and 2 D. 6 and -3 F. None of these
- _____ 6. What is the growth rate of the equation $y = 16(3)^x$?
A. 200% C. 300% E. 16%
B. 3% D. 30% F. None of these
- _____ 7. What is the x-intercept of the graph of $3x - 4y = 24$?
A. (6,0) C. (8,0) E. (12,0)
B. (0,8) D. (0,6) F. None of these
- _____ 8. What is the y-intercept of the line $5x + 3y = 45$?
A. (0,15) C. (0,9) E. (15,0)
B. (9,0) D. (-15,0) F. None of these
- _____ 9. Which of the following has exactly one x-intercept?
A. $y = (2 - 3x)(4 - x)$ C. $y = -2x^2 - x + 20$ E. $y = x^2 + 6x + 9$
B. $y = (x + 7)(2x - 9)$ D. $y = x^2 - 81$ F. None of these
- _____ 10. What is the decay rate of the equation $y = 390(0.78)^x$?
A. 78% C. 22% E. 7.8%
B. 0.78% D. 1.78% F. None of these

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Answer Section

MULTIPLE CHOICE

1. B
2. D
3. B
4. B
5. D
6. A
7. C
8. A
9. E
10. C