Algebra 1 Name_____

Lesson 2.4 Assignment

1) A bubble gum machine in a grocery store is filled with 500 candies. Each time a person puts in money, 10 candies come out. Write a function C that represents the amount of candy after m times money has been inserted into the machine.

2) Find $C(6)$. Explain what your solution means.

3) Does finding $C(-4)$ make sense in this situation? Why or why not?

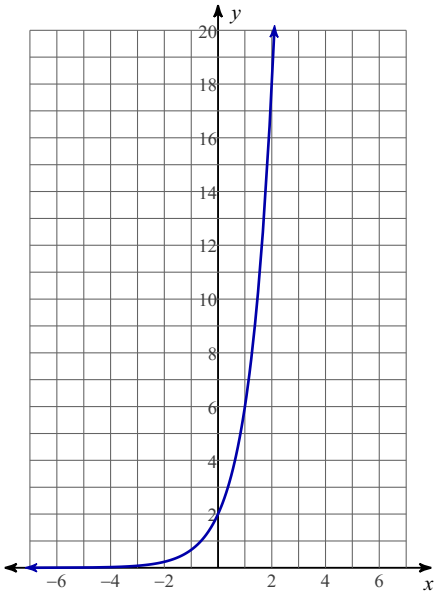
4) A radioactive element has been uncovered. Scientists know that it decays at a rate of 5% each year. The scientists have found a 40 gram sample. It has been active for some time. If time zero is when the scientists find the sample, write a function that models (G) the number of grams of the element after t years.

5) Find $G(5)$. Explain what your solution means.

6) Does finding $G(-10)$ make sense in this situation? Why or Why not?

Write an equation for each graph.

7)



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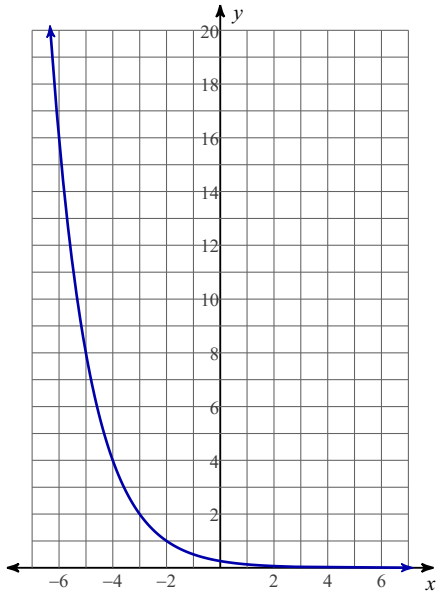
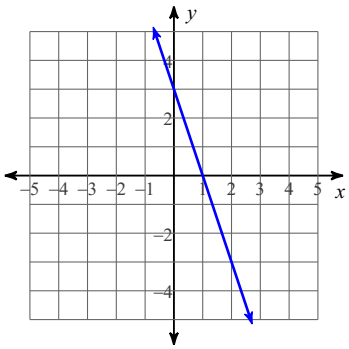


Write the slope-intercept form of the equation of each line.

9)



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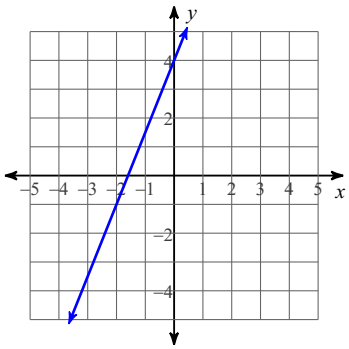
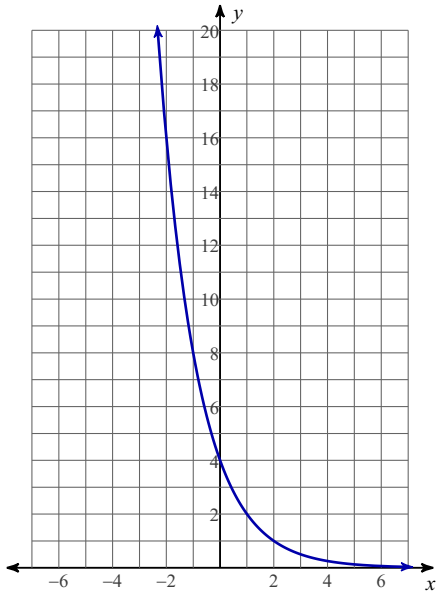


11) Let $f(x) = 10x + 100$ and $g(x) = 10^x$. As the input values (x) become larger, which function produces a larger output? How do you know?

Write an equation for each graph.

12)



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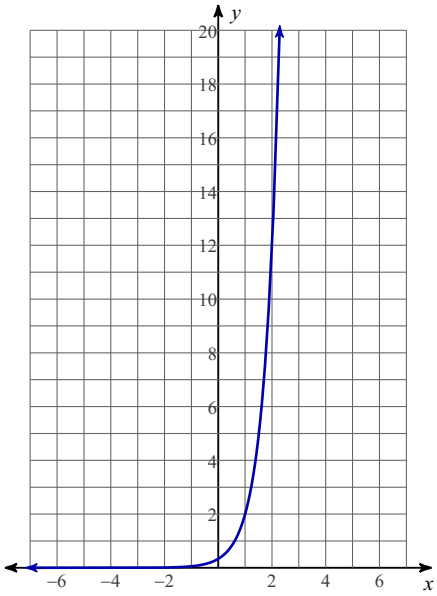

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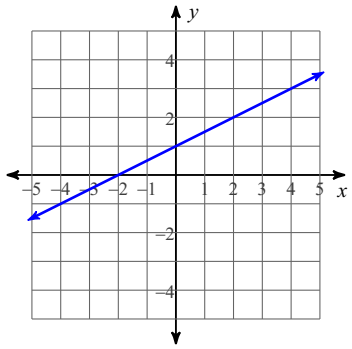
14)



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