

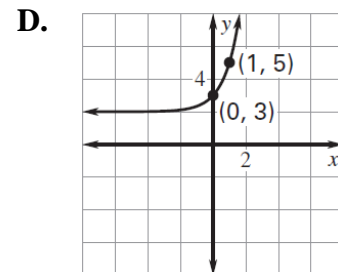
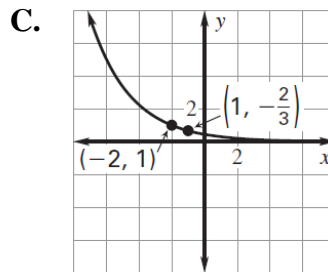
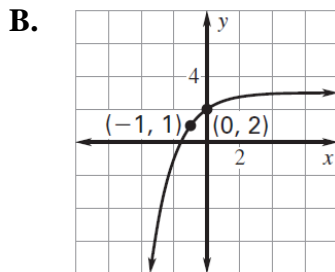
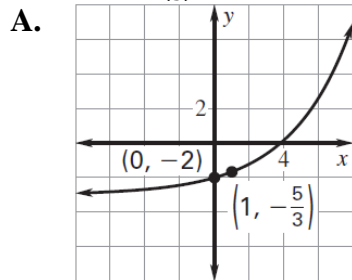
Match the function with its graph.

1.  $f(x) = \left(\frac{2}{3}\right)^{x+2}$

2.  $f(x) = 3^x + 2$

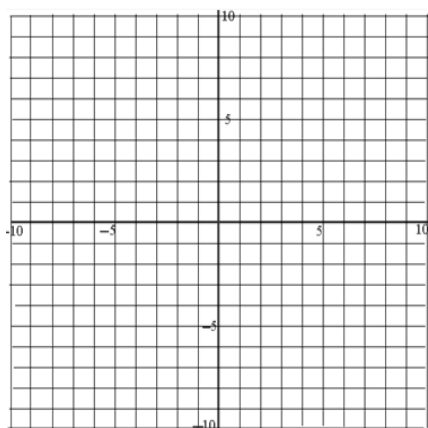
3.  $f(x) = \left(\frac{4}{3}\right)^x - 3$

4.  $f(x) = -\left(\frac{1}{2}\right)^x + 3$



Graph the function. Then state the domain and range.

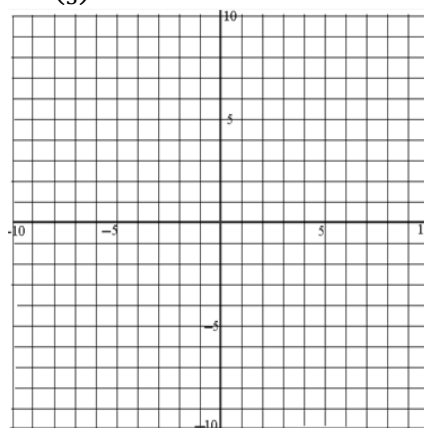
5.  $f(x) = 2^{x+1} - 3$



Domain: \_\_\_\_\_

Range: \_\_\_\_\_

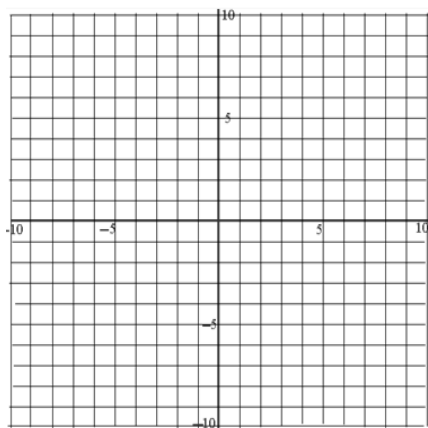
6.  $g(x) = -\left(\frac{1}{3}\right)^{x-4}$



Domain: \_\_\_\_\_

Range: \_\_\_\_\_

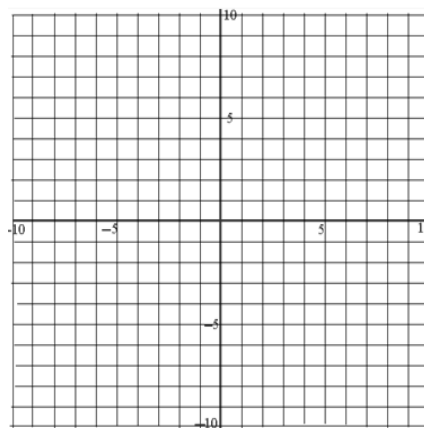
7.  $h(x) = -2 * 4^x + 5$



Domain: \_\_\_\_\_

Range: \_\_\_\_\_

8.  $y = 3e^{x-2} + 1$



Domain: \_\_\_\_\_

Range: \_\_\_\_\_

**For Exercises 9-10, use the following information.**

You buy a new car for \$22,500. The value of the car *decreases* by 25% each year.

9. Write an exponential decay model giving the car's value,  $A$ , after  $t$  years.
10. What is the value of the car after three years?

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**For Exercises 11-14, use the following information.**

You deposit \$3500 in an account that earns 1.3% annual interest. Find the balance after 5 years if the interest is compounded with the given frequency.

11. Annually

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12. Daily

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13. Continuously

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14. Which is the best deal? By how much?

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