

8.1

NAME \_\_\_\_\_

DATE \_\_\_\_\_

# Practice A

For use with pages 465-472

**MATCHING GRAPHS** Match the function with its graph.

1.  $y = 2 \cdot 5^x$

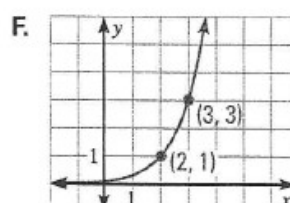
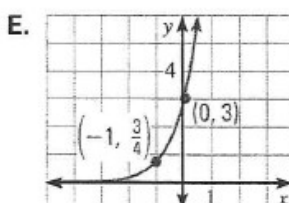
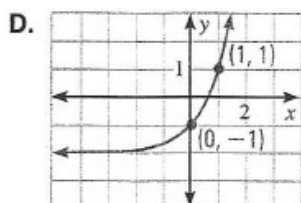
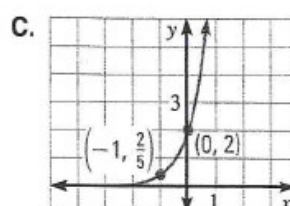
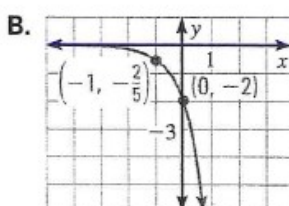
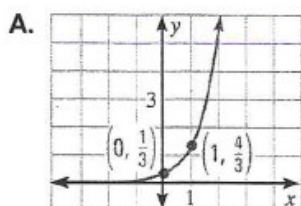
2.  $y = 3 \cdot 4^x$

3.  $y = -2 \cdot 5^x$

4.  $y = \frac{1}{3} \cdot 4^x$

5.  $y = 3^{x-2}$

6.  $y = 3^x - 2$



Explain how the graph of  $g$  can be obtained from the graph of  $f$ .

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

$g(x) = \left(\frac{4}{3}\right)^x + 2$

8.  $f(x) = 2^x$

$g(x) = 2^x - 5$

9.  $f(x) = \left(\frac{5}{3}\right)^x$

$g(x) = \left(\frac{5}{3}\right)^{x+1}$

10.  $f(x) = 5^x$

$g(x) = 5^{x-3}$

11.  $f(x) = 2^x$

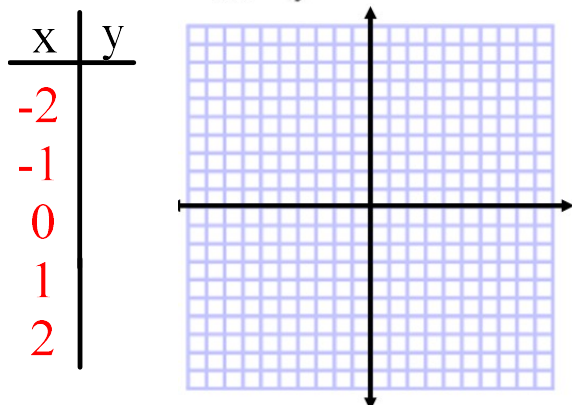
$g(x) = -2^x$

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

$g(x) = 3(2^x) + 2$

**Graph the function. State the domain and range.**

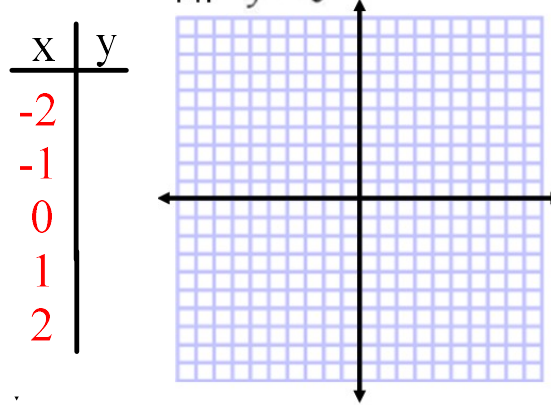
13.  $y = -2 \cdot 3^x$



Domain:

Range:

14.  $y = 3^{x-1}$

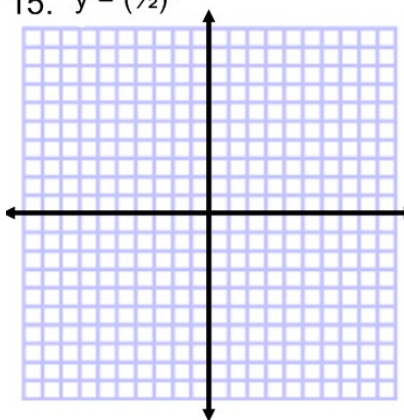


Domain:

Range:

15.  $y = (\frac{1}{2})^x$

| x  | y |
|----|---|
| -2 |   |
| -1 |   |
| 0  |   |
| 1  |   |
| 2  |   |

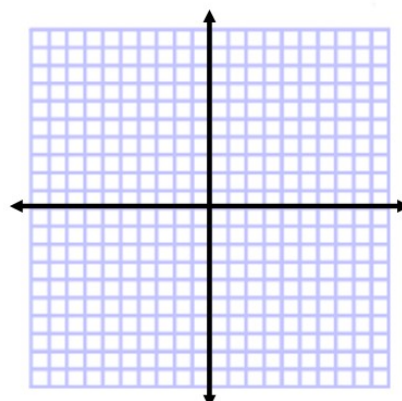


Domain:

Range:

16.  $y = 5^x - 3$

| x  | y |
|----|---|
| -2 |   |
| -1 |   |
| 0  |   |
| 1  |   |
| 2  |   |

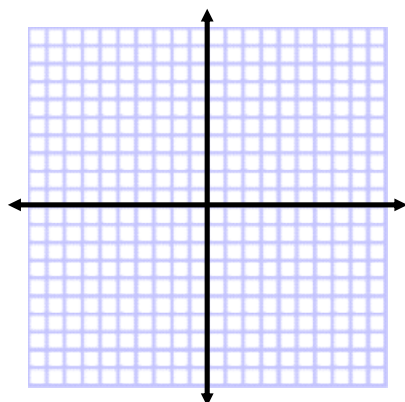


Domain:

Range:

17.  $y = 5^{x+1} + 2$

| x  | y |
|----|---|
| -2 |   |
| -1 |   |
| 0  |   |
| 1  |   |
| 2  |   |

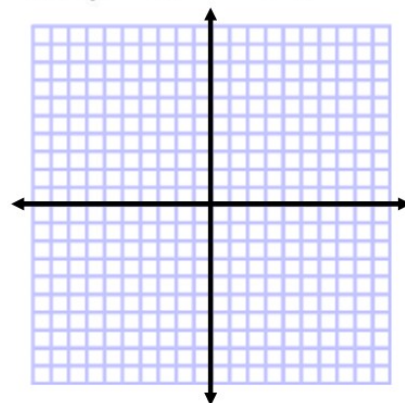


Domain:

Range:

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

| x  | y |
|----|---|
| -2 |   |
| -1 |   |
| 0  |   |
| 1  |   |
| 2  |   |



Domain:

Range: