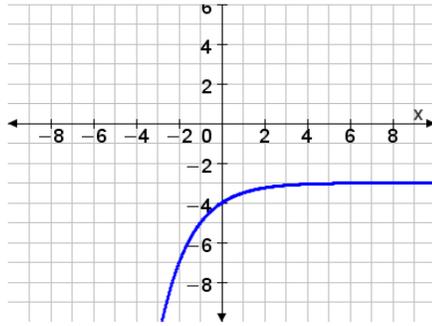


Graphing and analyzing exponential graphs

1. Which of the following could be the equation for the graph shown?

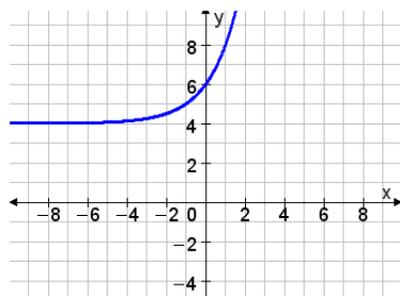
- A. $f(x) = -\left(\frac{1}{2}\right)^{x-3}$
- B. $f(x) = \left(\frac{1}{2}\right)^x - 3$
- C. $f(x) = -(2)^x - 3$
- D. $f(x) = -\left(\frac{1}{2}\right)^x - 3$



- 2. Domain:
- 3. Range:
- 4. End Behavior $x \rightarrow -\infty, y \rightarrow$
 $x \rightarrow \infty, y \rightarrow$
- 5. Asymptote:
- 6. y- intercept:
- 7. Zeros:
- 8. Growth/Decay?
- 9. Increasing/Decreasing?

10. Which of the following could be the equation for the graph ?

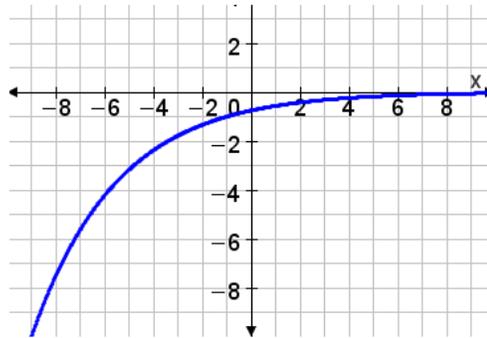
- A. $f(x) = \frac{3}{4}(2)^x - 4$
- B. $f(x) = 2\left(\frac{1}{2}\right)^x + 4$
- C. $f(x) = 2(2)^x + 4$
- D. $f(x) = 2(2)^{x+4}$



- 11. Domain:
- 12. Range:
- 13. End Behavior $x \rightarrow -\infty, y \rightarrow$
 $x \rightarrow \infty, y \rightarrow$
- 14. Asymptote:
- 15. y- intercept:
- 16. Zeros:
- 17. Growth/Decay?
- 18. Increasing/Decreasing?

19. Which of the following could be the equation for the graph shown?

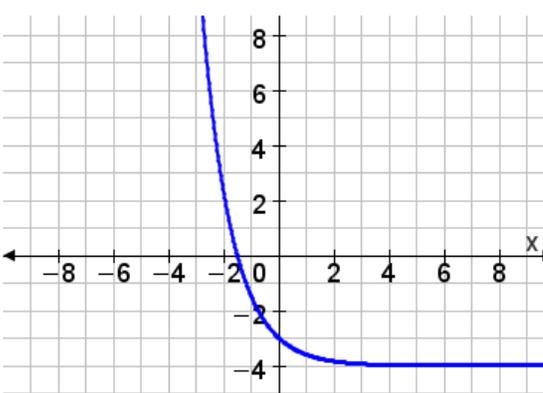
- A. $f(x) = -\left(\frac{3}{4}\right)^{x+1}$
- B. $f(x) = -\left(\frac{3}{4}\right)^x + 1$
- C. $f(x) = -\left(\frac{4}{3}\right)^x$
- D. $f(x) = \left(\frac{3}{4}\right)^{x+1}$



- 20. Domain:
- 21. Range:
- 22. End Behavior $x \rightarrow -\infty, y \rightarrow$
 $x \rightarrow \infty, y \rightarrow$
- 23. Asymptote:
- 24. y- intercept:
- 25. Zeros:
- 26. Growth/Decay?
- 27. Increasing/Decreasing?

28. Which of the following could be the equation for the graph shown?

- A. $f(x) = \left(\frac{5}{2}\right)^x - 4$
- B. $f(x) = \left(\frac{2}{5}\right)^x - 4$
- C. $f(x) = -\left(\frac{2}{5}\right)^x - 4$
- D. $f(x) = -\left(\frac{5}{2}\right)^x - 4$



- 29. Domain:
- 30. Range:
- 31. End Behavior $x \rightarrow -\infty, y \rightarrow$
 $x \rightarrow \infty, y \rightarrow$
- 32. Asymptote:
- 33. y- intercept:
- 34. Zeros:
- 35. Growth/Decay?
- 36. Increasing/Decreasing?