



Topic 7: Graphing in the Coordinate Plane

Questions 1 – 5 Graph the equation.

1. $y = 4x - 2$

2. $y = \frac{1}{3}x + 1$

3. $y = -\frac{1}{2}x - 6$

4. $x = 7$

5. $y = -4$

Questions 6 – 9 Determine the slope of the line passing through the given points.

6. (4, -10) and (8, 12)

7. (-7, 0) and (-7, 10)

8. (-6, 5) and (0, 5)

9. (-1, 5) and (7, -11)

Questions 10 – 12 Determine the x- and y-intercepts of the graph of the given line.

10. $y = 3x + 4$

11. $y = -x + 8$

12. $x = -2y - 5$

Questions 13 – 15 Graph the exponential equation.

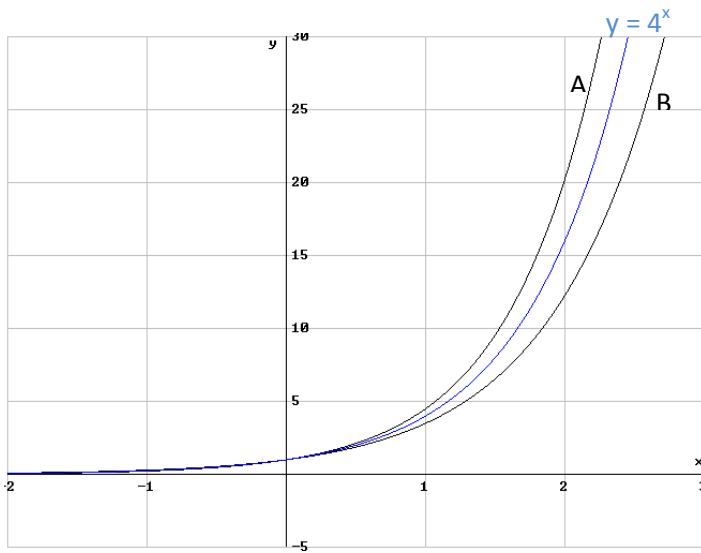
13. $y = 6^x$

14. $y = 5^{-x}$

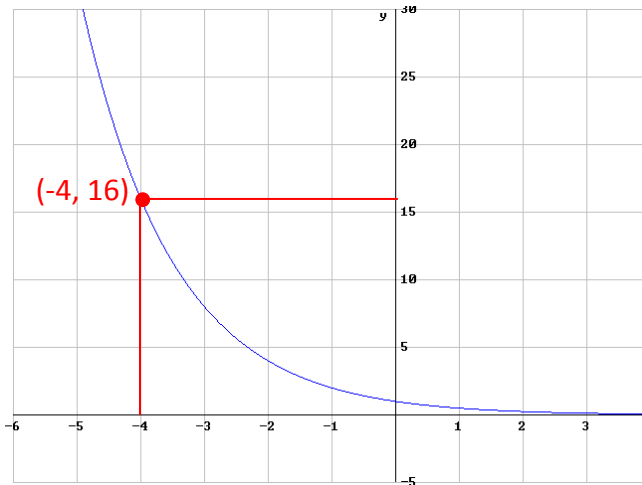
15. $y = \left(\frac{1}{4}\right)^x$



16. Identify the graph of the exponential equation $y = 4.5^x$.



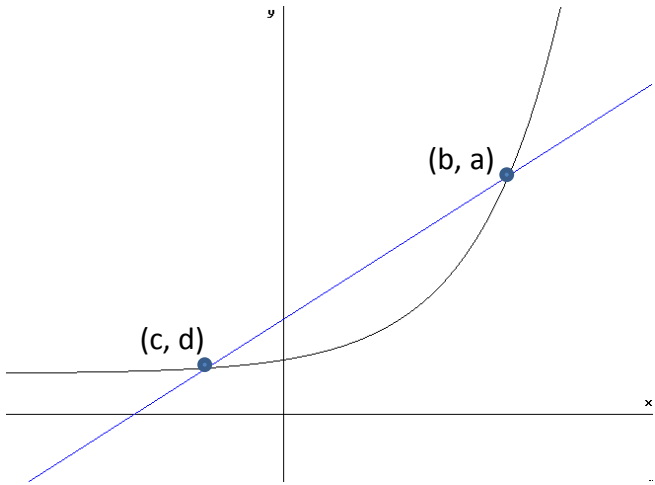
17. Which of the following is the equation for the given graph?



- (a) $y = 2^x$
- (b) $y = \left(\frac{1}{4}\right)^x$
- (c) $y = 2^{-x}$
- (d) $y = 4^x$



18. Over what interval of x is the graph of the line below the graph of the exponential curve?
Express final answer as an open interval.



19. Over what interval of x is the graph of the line above the graph of the exponential curve?
Express final answer as an open interval.

