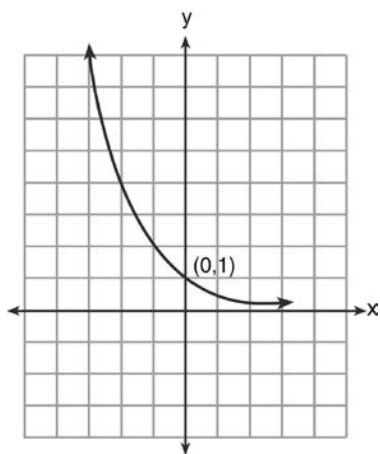


A2.A.52: Identifying the Equation of a Graph: Identify relations and functions, using graphs

- 1 The table of values below can be modeled by which equation?

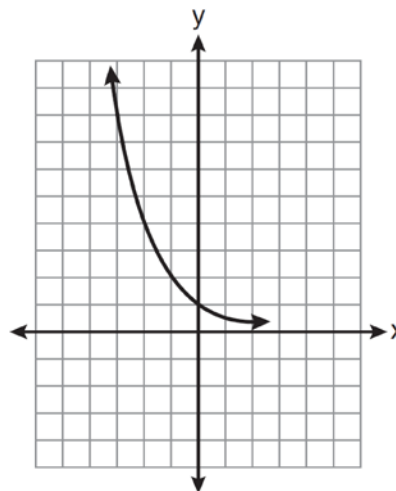
x	y
-2	5
-1	4
0	3
1	4
2	5

- 1) $f(x) = |x + 3|$
 2) $f(x) = |x| + 3$
 3) $f(y) = |y + 3|$
 4) $f(y) = |y| + 3$
- 2 What is the equation of the graph shown below?



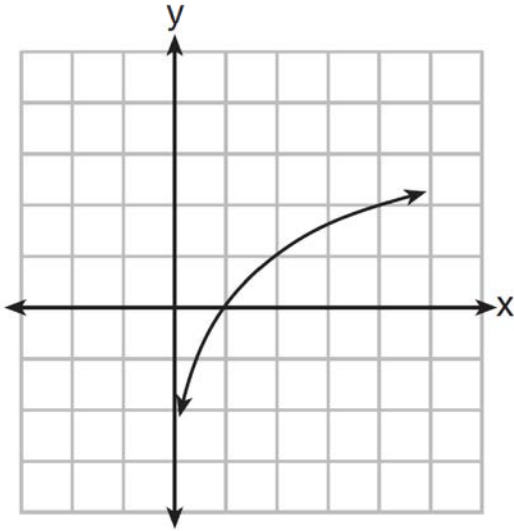
- 1) $y = 2^x$
 2) $y = 2^{-x}$
 3) $x = 2^y$
 4) $x = 2^{-y}$

- 3 Which equation is represented by the graph below?



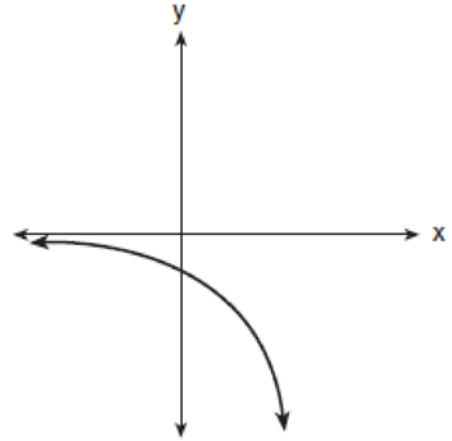
- 1) $y = 5^x$
 2) $y = 0.5^x$
 3) $y = 5^{-x}$
 4) $y = 0.5^{-x}$
- 4 Four points on the graph of the function $f(x)$ are shown below.
 $\{(0, 1), (1, 2), (2, 4), (3, 8)\}$
 Which equation represents $f(x)$?
- 1) $f(x) = 2^x$
 2) $f(x) = 2x$
 3) $f(x) = x + 1$
 4) $f(x) = \log_2 x$

- 5 Which equation is represented by the accompanying graph?



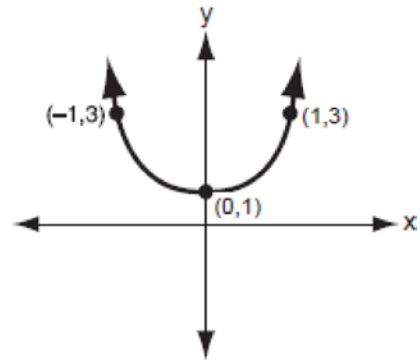
- 1) $y = 2^x$
- 2) $y = 2^{-x}$
- 3) $y = \log x$
- 4) $y = \log_2 x$

- 6 Which equation is represented by the accompanying graph?



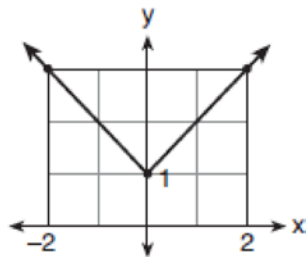
- 1) $y = 2^x$
- 2) $y = -2^x$
- 3) $y = 2^{-x}$
- 4) $y = x^2 - 2$

- 7 Which equation is represented by the accompanying graph?



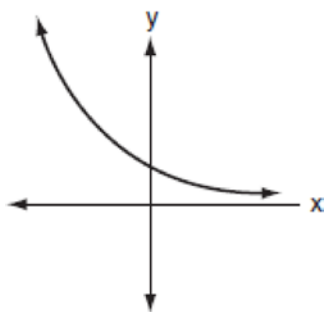
- 1) $y = 2x^2 + 1$
- 2) $y = 2(x^2 + 1)$
- 3) $y = x^2$
- 4) $y = 2x^2$

- 8 Which equation represents the function shown in the accompanying graph?



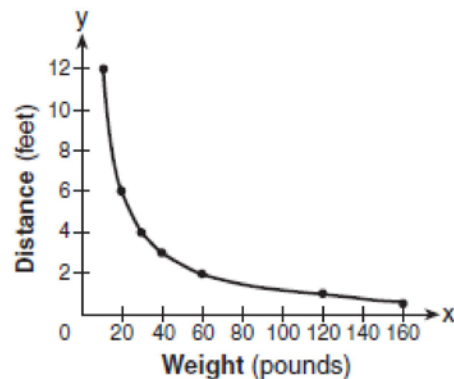
- 1) $f(x) = |x| + 1$
- 2) $f(x) = |x| - 1$
- 3) $f(x) = |x + 1|$
- 4) $f(x) = |x - 1|$

- 9 Which equation best represents the accompanying graph?



- 1) $y = 2^x$
- 2) $y = x^2 + 2$
- 3) $y = 2^{-x}$
- 4) $y = -2^x$

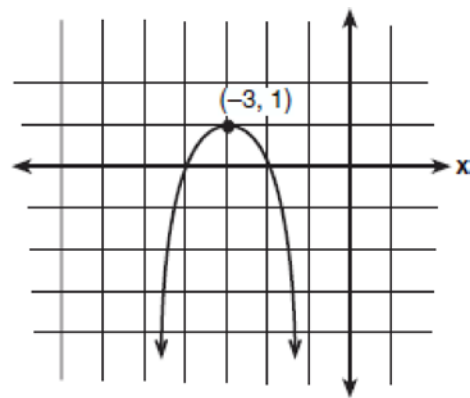
- 10 The accompanying graph shows the relationship between a person's weight and the distance that the person must sit from the center of a seesaw to make it balanced.



Which equation best represents this graph?

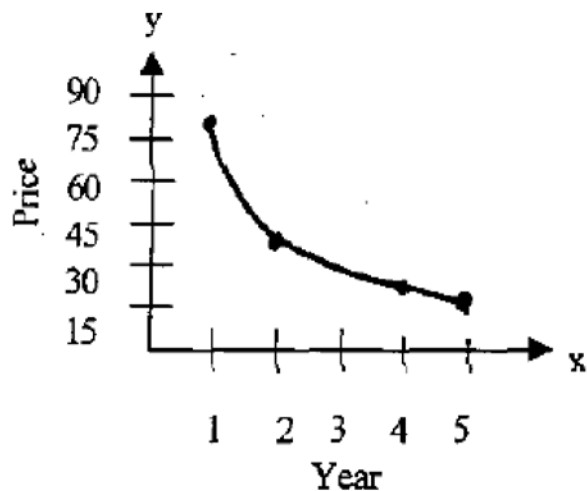
- 1) $y = 12x^2$
- 2) $y = -120x$
- 3) $y = 2 \log x$
- 4) $y = \frac{120}{x}$

- 11 Which equation represents the parabola shown in the accompanying graph?



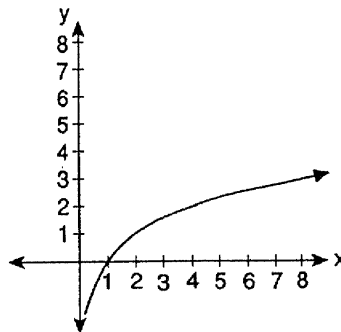
- 1) $f(x) = (x + 1)^2 - 3$
- 2) $f(x) = -(x - 3)^2 + 1$
- 3) $f(x) = -(x + 3)^2 + 1$
- 4) $f(x) = -(x - 3)^2 - 3$

- 12 The price of a certain stock has decreased over 5 years, as shown in the graph below. Which of the following equations best represents this graph?



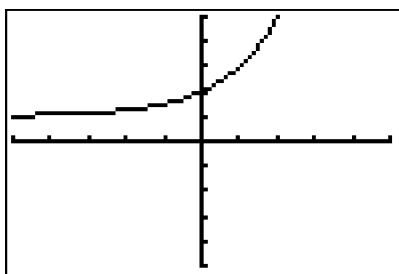
- 1) $y = 60x^2$
- 2) $y = \frac{80}{x}$
- 3) $y = 63 \log x$
- 4) $y = -25x$

- 14 Which equation is represented by the graph in the accompanying diagram?



- 1) $y = \log x$
- 2) $y = \log_2 x$
- 3) $y = 2^x$
- 4) $y = 10^x$

- 13 The graph below can be represented by which equation?



- 1) $y = 2^x$
- 2) $y = x^2 + 2$
- 3) $y = 2^{x+1}$
- 4) $y = 2^x + 1$

A2.A.52: Identifying the Equation of a Graph: Identify relations and functions, using graphs
Answer Section

1	ANS: 2	REF: 011502a2
2	ANS: 2	REF: 011301a2
3	ANS: 2	REF: 061108a2
4	ANS: 1	REF: 061004a2
5	ANS: 4	REF: 061016b
6	ANS: 2	REF: 080901b
7	ANS: 1	REF: 010801b
8	ANS: 1	REF: 080707b
9	ANS: 3	REF: 010701b
10	ANS: 4	REF: 080312b
11	ANS: 3	REF: 010303b
12	ANS: 2	REF: fall9913b
13	ANS: 4	REF: fall9902b
14	ANS: 2	REF: 019534siii