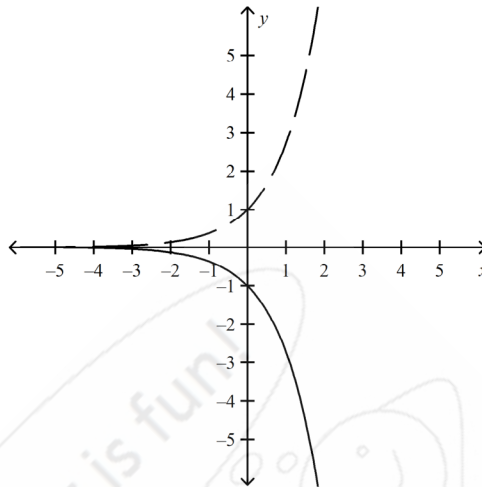


Natural Base e Functions**Multiple Choice**

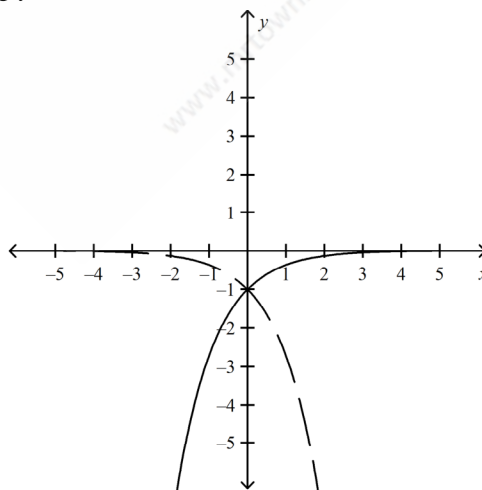
Identify the choice that best completes the statement or answers the question.

- _____ 1. The graph shows the parent function $y = e^x$ with dashes. Which of the following matches the graph of the solid curve?



- a. $y = -e^{-x}$
b. $y = e^{-x}$
c. $y = e^x$
d. $y = -e^x$

- _____ 2. The graph shows the function $y = -e^x$ with dashes. Which of the following matches the graph of the solid curve?



- a. $y = e^{-x}$
b. $y = -e^{-x}$
c. $y = e^x$
d. $y = -e^x$

3. The chart shows locations for the function, $y = ae^{rx}$. Which is the closest value of r when a is 0.9?

x	-1	0	1	2
y	0.3	0.9	2.704	8.123

- a. 1.1 c. 1.6
b. 1.4 d. 1.3

Numeric Response

4. The chart shows locations for the function, $y = ae^{rx}$. What is the value of r to the nearest tenth when a is -2.1?

x	-2	-1	0	1
y	-0.7725	-1.2737	-2.1	-3.4623

5. The chart shows locations for the function, $y = ae^{rx}$. What is the value of a to the nearest tenth when r is 2.6?

x	-2	-1	0	1
y	-0.0127	-0.1708	-2.3	-30.9666

6. The chart shows locations for the function, $y = ae^{rx}$. What is the value of r to the nearest tenth when a is -2.3?

x	-2	-1	0	1
y	-5.1187	-3.4312	-2.3	-1.5417

7. The chart shows locations for the function, $y = ae^{rx}$. What is the value of r to the nearest tenth when a is 1.4?

x	-1	0	1	2
y	1.71	1.4	1.1462	0.9384

Natural Base e Functions Answer Section

MULTIPLE CHOICE

1. ANS: D
2. ANS: B
3. ANS: A

NUMERIC RESPONSE

4. ANS: 0.5
5. ANS: -2.3
6. ANS: -0.4
7. ANS: -0.2

