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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Find the function of the form  whose graph is given.   ​   |  |  |  | | --- | --- | --- | |  | a. |  | |  | b. |  | |  | c. |  | |  | d. |  | |  | e. | none of these | |

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| 2. Identify the logarithmic function corresponding to the graph.  ​     |  |  |  | | --- | --- | --- | |  | a. | *y* = ln (4 + *x*) | |  | b. | *y* = ln (*x*) + 4 | |  | c. | none of these | |  | d. | *y* = ln (*x*) – 4 | |  | e. | *y* = ln (4 – *x*) | |

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| 3. Use the graph of  below to help you identify the graph of .  ​    ​  ​   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. |  | b. |  | |  | c. |  | d. |  | |  | e. | none of these |  |  | |

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| 4. Identify the graph of the function *y* = log3(*x* – 3) – 1 using the graph of *y*​=log3*​x* shown below.  ​    ​   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. |  | b. |  | |  | c. | ​ | d. |  | |  | e. | none of these |  |  | |

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| 5. The graph of a logarithmic function  is shown below. Find the base .     |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | a. |  | b. | 1 | c. |  | d. | 3 | |  | e. | –3 |  |  |  |  |  |  | |

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| 49. Which one of the following graphs represents the function ?   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. |  | b. |  | |  | c. |  | d. |  | |  | e. | None of these options |  |  | |

A graph of a function

Description automatically generated