



Logs & Exponentials

Name:.....

Date:.....

$\log x + \log y =$

A $\log(x + y)$

B $\log x^y$

C $y \log x$

D $\log xy$

Correct Answer: A B C D

Explanation:

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$\frac{1}{2} \log 16 + \log 2 =$

a. $\log 16$

b. $\log 6$

c. $\frac{1}{2} \log 32$

d. $\log 8$

Correct Answer: A B C D

Explanation:

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A $x - axis$ **B** $y = x$

C $x = 0$ **D** $y = 0$

What is the equation of the asymptote for the curve below?

$y = e^x$

Correct Answer: A B C D

Explanation:

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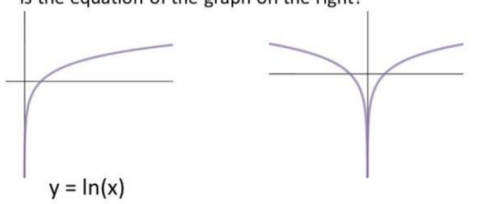
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A $y = \ln|x|$
 B $y = |\ln x|$

C $x = -\ln x$
 D $y = |-\ln x|$

The equation of the graph on the left is given. What is the equation of the graph on the right?



$y = \ln(x)$

Correct Answer: A B C D

Explanation:

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Solve (getting the exact solution)

$2e^x = 8$

a) $x = e^4$ c) $x = \frac{3 \ln 2}{2}$
 b) $x = 2 \ln 2$ d) $x = 4$

Correct Answer: A B C D

Explanation:

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A $x = \frac{\ln 5 - 1}{2}$
 B $x = \frac{\ln 5 + 1}{2}$

C $x = \frac{e^5 - 1}{2}$
 D $x = \frac{e^5 + 1}{2}$

Solve

$e^{2x-1} = 5$

Correct Answer: A B C D

Explanation:

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Given $y = xe^x$ then $\frac{dy}{dx}$ is

A xe^x
 B $xe^x + e^x$
 C $1 + e^x$
 D e^x

Correct Answer: A B C D

Explanation:

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What is the integral of $\frac{1}{x}$?

a) $-x^{-2}$

c) $\frac{1}{x^2}$

b) $\ln x$

d) can't integrate $\frac{1}{x}$

Correct Answer: A B C D

Explanation:

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