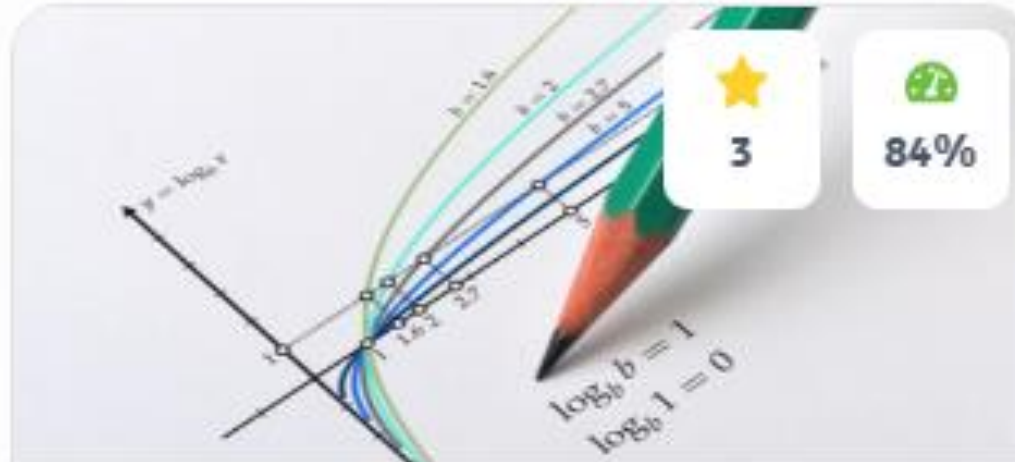




Exponential and Logarithmic Functions and Relations

13. Exponential and Logarithmic Expressions: Exponential and...

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Lesson 13. Exponential



Review

What is $\log_2 16 = 4$ in exponential form?

☒ $2^4 = 16$



☐ $16^2 = 4$

☐ $4^2 = 16$

☐ $16^4 = 2$

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Use the definition of logarithms to rewrite in exponential form.

$\log_b x = y$ if and only if $b^y = x$.

$\log_2 16 = 4 \rightarrow 2^4 = 16$

Write $9^{-2} = \frac{1}{81}$ in logarithmic form.

Select your answer from the drop-down menu.

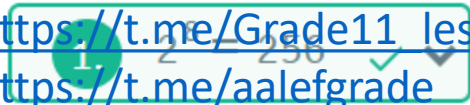
$9^{-2} = \frac{1}{81} \rightarrow$ https://t.me/Grade11_lesson
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1. $\log_9 \frac{1}{81} = -2$



Write $\log_2 256 = 8$ in exponential form.

Select your answer from the drop-down menu.

$\log_2 256 = 8 \rightarrow$  https://t.me/Grade11_lesson
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1. $2^8 = 256$



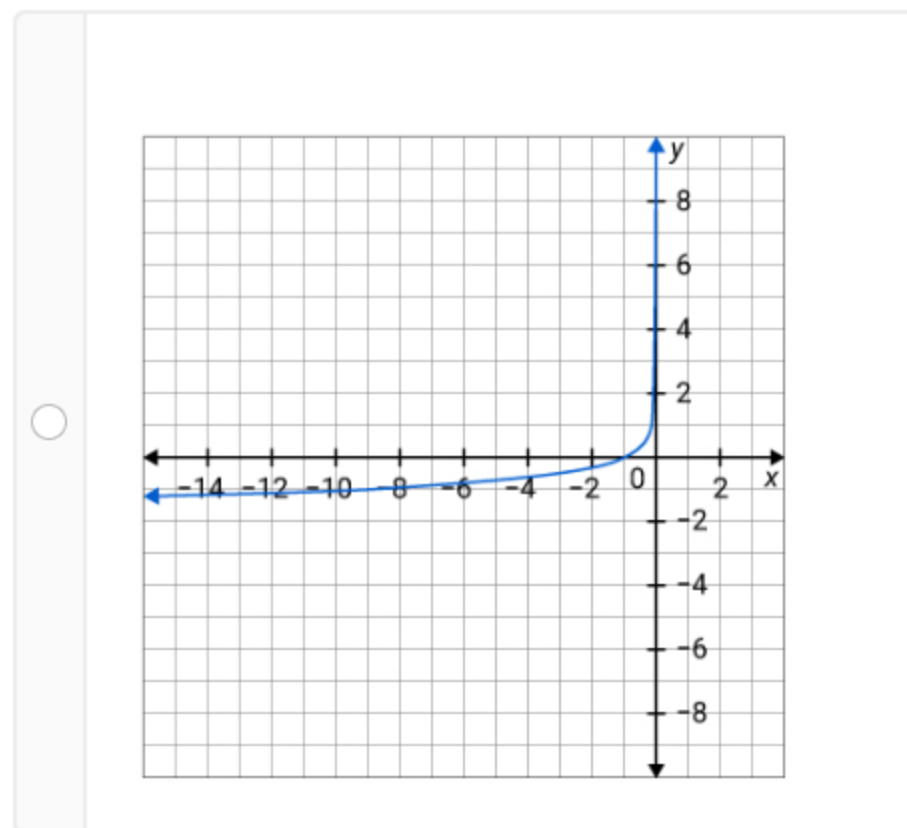
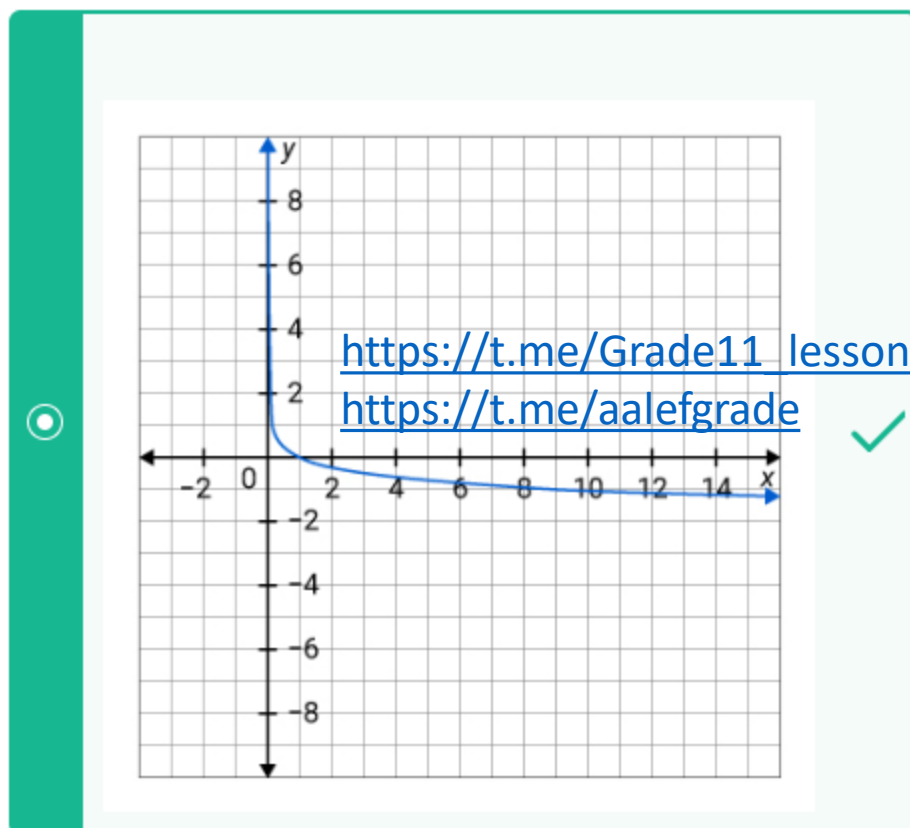
Evaluate $\log_{49} 7$.

Enter your answer in the space provided.

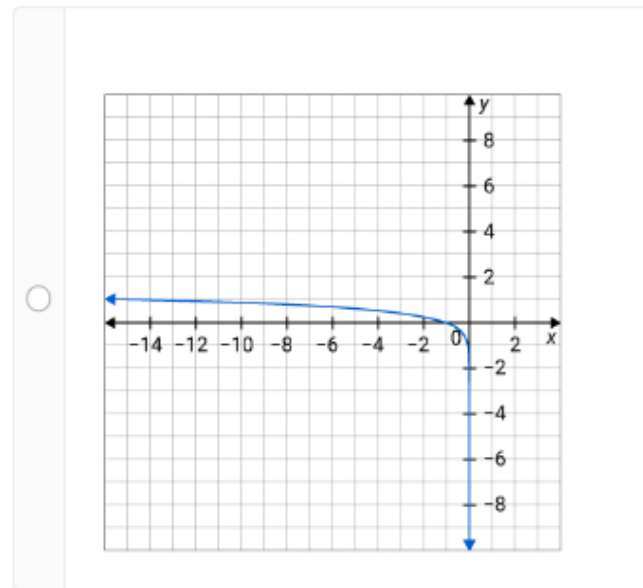
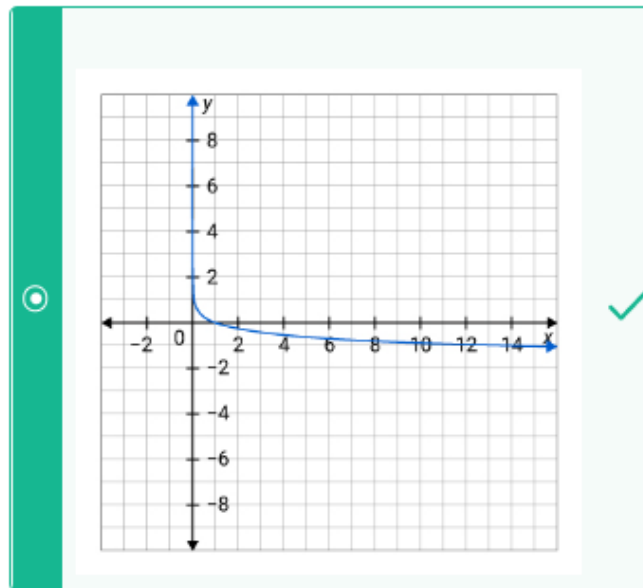
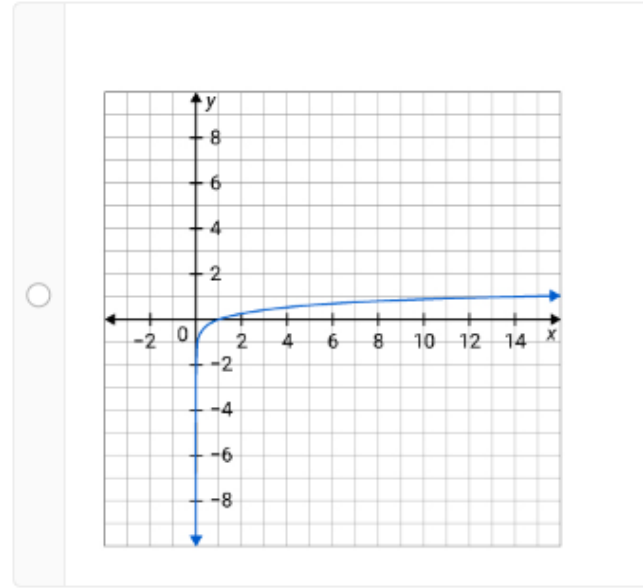
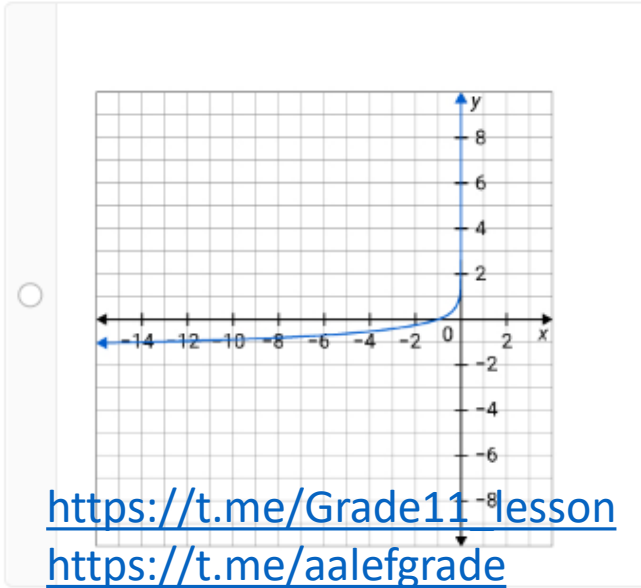
$\log_{49} 7 =$ 1. $\frac{1}{2}$ https://t.me/Grade11_lesson <https://t.me/aalefgrade> ✓

1. $\frac{1}{2}$ ✓

Which graph shows $y = \log_{\frac{1}{9}} x$?



Which graph shows $y = \log_{\frac{1}{14}} x$?



What is $4^{-5} = \frac{1}{1024}$ in logarithmic form?



$$4^{-5} = \frac{1}{1024} \rightarrow \log_{\frac{1}{1024}} -5 = 4$$

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$$4^{-5} = \frac{1}{1024} \rightarrow \log_4 \frac{1}{1024} = -5$$

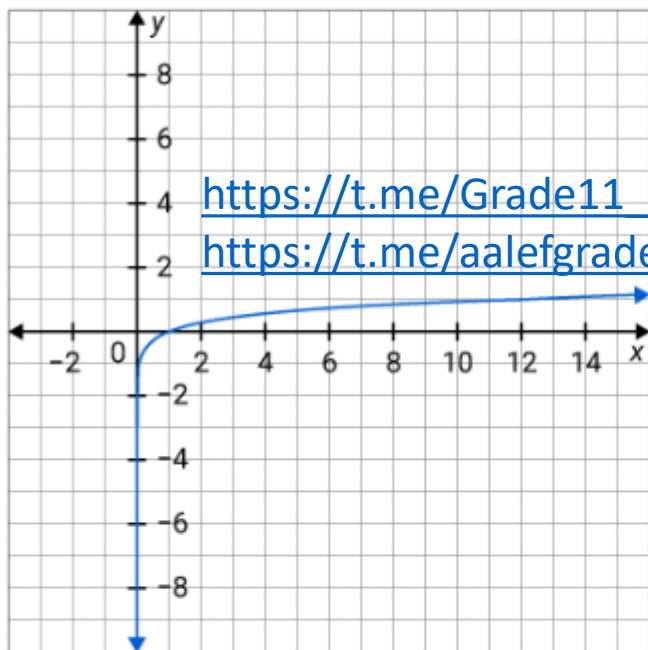


$$4^{-5} = \frac{1}{1024} \rightarrow \log_4 -5 = \frac{1}{1024}$$

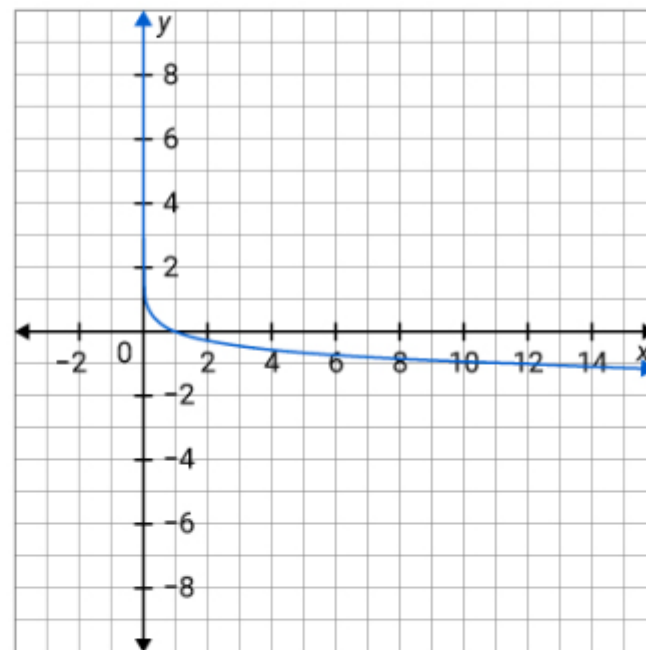


$$4^{-5} = \frac{1}{1024} \rightarrow \log_{\frac{1}{1024}} 4 = -5$$

Which graph shows $y = \log_{12} x$?



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Write $\log_3 27 = 3$ in exponential form.

Enter your answer in the space provided.

$\log_3 27 = 3 \rightarrow$

1. $3^3 = 27$

