

Warm Up

after solving exponential and log functions

Solve.

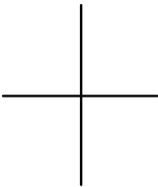
1. $2e^x = 14$

2. $64^{2x+1} = 8^{-x+2}$

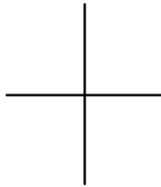
3. $\log(7x-4) = 1 + \log(x-1)$

Graph.

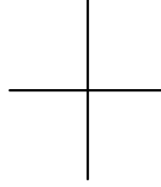
4. $y = e^{x-2}$



5. $y = \pi^x - 3$



6. $y = \log(2-x)$



Warm Up

after solving exponential and log functions

Solve.

1. $2e^x = 14$

$$\frac{2}{2} e^x = \frac{14}{2}$$

$$e^x = 7$$

$$\ln e^x = \ln 7$$

$$x = \ln 7$$

2. $64^{2x+1} = 8^{-x+2}$

$$(8^2)^{2x+1} = 8^{-x+2}$$

$$2(2x+1) = -x+2$$

$$4x+2 = -x+2$$

$$5x = 0$$

$$x = 0$$

3. $\log(7x-4) = 1 + \log(x-1)$

$$\log(7x-4) - \log(x-1) = 1$$

$$\log \frac{7x-4}{x-1} = 1$$

$$(x-1)10^1 = \frac{7x-4}{x-1} \quad (x \neq 1)$$

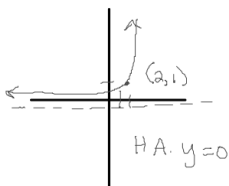
$$10x-10 = 7x-4$$

$$3x = 6$$

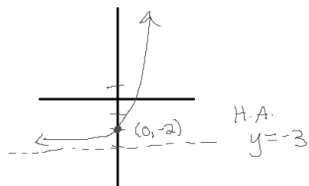
$$x = 2$$

Graph.

4. $y = e^{x-2}$



5. $y = \pi^x - 3$



6. $y = \log(2-x)$

