

Sheet # 541 =

NAME: _____

Period: _____

SOLVING EXPONENTIAL & LOGARITHMIC EQUATIONS

1. $e^{2x} = e^{x+3}$

6. $e^{2x} + 3 = 10$

2. $\log(2x+1) = \log(15)$

7A) $3 \log(x+1) = 9$

3A) $10^x = 14$

7B) $\log_3(2x) = 4$

3B) $2e^{3x} + 1 = 5$

8. $\frac{1}{2} = e^{0.01t}$

4. $\log(2x) = 3$

9. Consider $y = 3e^{kt}$

a, Find k if $(10, 2)$ is on the graph.

b, Find y if $t = 15$.

c, For what value of t is $y = \frac{3}{2}$?
(half of the y value when $t=0$)

5. $4 \log(x+2) = 8$