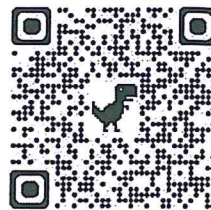


Name Schlansky
Mr. Schlansky

Use MC
Strategy!
store each answer!

Date _____
Algebra II



Exponential Equations Multiple Choice

1. Which is the solution to: $2(3)^{4x} + 1 = 11$?

- 1) $\frac{\log 5}{4 \log 3} \rightarrow X \quad || = 11 \checkmark$ 3) $\frac{\log 3}{4 \log 5}$
2) $\frac{4 \log 5}{\log 3}$ 4) $\frac{4 \log 3}{\log 5}$

2. Which is the solution to: $256 + 4(2)^{6x} = 2700$?

- 1) $\frac{\ln 4}{6 \ln 2}$ 3) $\frac{\ln 611}{6 \ln 2} \rightarrow X \quad 2700 = 2700 \checkmark$
2) $\frac{6 \ln 423}{\ln 4}$ 4) $\frac{6 \ln 2444}{\ln 4}$

3. Which is the solution to: $1 - 2(5)^{2x} = -5$?

- 1) $\frac{\ln 6}{2 \ln 3}$ 3) $\frac{2 \ln 4}{\ln 3}$
2) $\frac{2 \ln 5}{\ln 1}$ 4) $\frac{\ln 3}{2 \ln 5} \rightarrow X \quad -5 = -5 \checkmark$

4. Which is the solution to: $5(3)^{2x} = 30$?

- 1) $\frac{\log 6}{3 \log 2}$ 3) $\frac{2 \log 6}{\log 3}$
2) $\frac{\log 6}{2 \log 3} \rightarrow X \quad 30 = 30 \checkmark$ 4) $\frac{2 \log 3}{\log 6}$

5. The solution to the equation $5e^{x+2} = 7$ is

- 1) $-2 + \ln\left(\frac{7}{5}\right) \rightarrow X$ 3) $\frac{-3}{5}$
 2) $\left(\frac{\ln 7}{\ln 5}\right) - 2$ 4) $-2 + \ln(2)$
- Handwritten notes: $7=7$ ✓*

6. What is the solution of $2(3^{x+4}) = 56$?

- 1) $x = \log_3(28) - 4 \rightarrow X$ 3) $x = \log(25) - 4$
 2) $x = -1$ 4) $x = \frac{\log(56)}{\log(6)} - 4$
- Handwritten notes: $56=56$ ✓*

7. The solution to the equation $6(2^{x+4}) = 36$ is

- 1) -1 3) $\ln(3) - 4$
 2) $\frac{\ln 36}{\ln 12} - 4$ 4) $\frac{\ln 6}{\ln 2} - 4 \rightarrow X$
- Handwritten notes: $36=36$ ✓*

8. Which expression is *not* a solution to the equation $2^t = \sqrt{10}$?

- 1) $\frac{1}{2} \log_2 10 \rightarrow X$ 3) $\log_4 10 \rightarrow X$ *Handwritten notes: $3.16.. = 3.16..$ ✓*
 2) $\log_2 \sqrt{10} \rightarrow X$ 4) $\log_{10} 4 \rightarrow X$ *Handwritten notes: $1.517.. \neq 3.16..$ X*
- Handwritten notes: $3.16.. = 3.16..$*