

Name : \_\_\_\_\_

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

Date : \_\_\_\_\_

## Exponential Equation Solving with Logarithms

Solve each equation. Round answers to the nearest ten-thousandth.

1)  $4e^{-6k+4} - 4 = 15$

9)  $12^{2x-4} + 6 = 23$

2)  $13^w = 16$

10)  $e^{g+2} + 5 = 24$

3)  $6 \cdot 8^{2n} = 17$

11)  $2e^{4s+6} + 8 = 25$

4)  $2e^{-3p-1} - 8 = 18$

12)  $3^{b+1} - 4 = 26$

5)  $2^{6s-3} + 3 = 19$

13)  $5^{g+9} + 4 = 27$

6)  $e^{m+4} - 5 = 20$

14)  $6 \cdot 14^{4g} = 28$

7)  $11^p = 21$

15)  $7^{b+9} + 1 = 29$

8)  $15^w = 22$

16)  $2 \cdot 13^{2p} = 30$



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## Exponential Equation Solving with Logarithms

Solve each equation. Round answers to the nearest ten-thousandth.

1)  $4e^{-6k+4} - 4 = 15$

0.4070

2)  $13^w = 16$

1.0810

3)  $6 \cdot 8^{2n} = 17$

0.2504

4)  $2e^{-3p-1} - 8 = 18$

-1.1883

5)  $2^{6s-3} + 3 = 19$

1.1667

6)  $e^{m+4} - 5 = 20$

-0.7811

7)  $11^p = 21$

1.2697

8)  $15^w = 22$

1.1414

9)  $12^{2x-4} + 6 = 23$

2.5701

10)  $e^{g+2} + 5 = 24$

0.9444

11)  $2e^{4s+6} + 8 = 25$

-0.9650

12)  $3^{b+1} - 4 = 26$

2.0959

13)  $5^{g+9} + 4 = 27$

-7.0518

14)  $6 \cdot 14^{4g} = 28$

0.1459

15)  $7^{b+9} + 1 = 29$

-7.2876

16)  $2 \cdot 13^{2p} = 30$

0.5279

