

Exponential Equations with Logs #2

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

1) $7^{r-5.4} - 1.1 = 19.8$

2) $10^{7b} - 7 = -5$

3) $14^{10n+10} = 91$

4) $17^{10x-2} = 37$

5) $-18^x = -35$

6) $3 \cdot 15^x = 69$

7) $9^v - 2.4 = 14$

8) $11^a - 10 = 33$

$$9) 10^{-3k} + 4 = 99$$

$$10) 13^{a-9} - 10 = 67$$

$$11) 16^{1.9x+10} - 4.7 = 45$$

$$12) 9 \cdot 19^{9p-10} = 73$$

$$13) -4^m - 1 = -96$$

$$14) -14^n + 7 = 0$$

$$15) -9 \cdot 10^{r+8} + 5 = -82$$

$$16) -10 \cdot 18^{x+6} + 3 = 0$$

$$17) -10 \cdot 3^{2-6v} - 0.4 = -68$$

$$18) 10 \cdot 16^{6-6.6n} + 4 = 59$$

$$19) -10 \cdot 15^{-0.1n-2} - 5 = -93$$

$$20) 10 \cdot 19^{4-x} - 9 = 7$$

$$21) -10 \cdot 5^{10b+5} + 7 = -87$$

$$22) 5 \cdot 10^{-5a-4} - 3.2 = 15$$