Extra Practice

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

1)
$$11^{4-10r} + 4 = 9$$

2)
$$19^{9-3x} - 6 = 59.9$$

3)
$$-2^{9x-7} = -42$$

4)
$$3^{6n+8} + 5 = 38$$

5)
$$17^{6-4n} - 1.7 = 82$$

Solve each equation.

6)
$$\log_5(x-5) - \log_5(x+1) = 4$$

7)
$$\log_9 (-2x - 1) - \log_9 2 = 1$$

8)
$$\log_8 (-x-5) - \log_8 4 = \log_8 44$$

9)
$$\log_5 (3 - 4x^2) + \log_5 8 = \log_5 6$$

10)
$$\log_4 10 - \log_4 (3x - 2) = 4$$

1) 0.3329

2) 2.5259

3) 1.3769

4) -0.8029

5) 1.1093

6) No solution.

7) $\left\{-\frac{19}{2}\right\}$

8) {-181}

9) $\left\{\frac{3}{4}, -\frac{3}{4}\right\}$

10) $\left\{ \frac{87}{128} \right\}$