

Solve each equation. YOU MUST SHOW YOUR WORK.

1. $8^x = 554$

2. $12^x = 8$

3. $\left(\frac{4}{3}\right)^x = \frac{2}{3}$

4. $3^x + 1.8 = 31.4$

5. $2^x - 2 = 3.7$

6. $6^{-x} = 14$

7. $0.9^{2x} = 0.25$

8. $3 - \left(\frac{1}{8}\right)^x = -2$

9. $5^{3x} - 62 = 432$

10. $12^{0.2x} + 1 = 29$