Solving Exponential Equations *– in book: Section 9.6 p. 594*

Solve each equation or inequality by using logarithms.

1. $8^x = 10$

2. $12^x = 18$

3. $2.4^x \leq 20$

4. $1.8^{x-5} = 19.8$

5. $4^{2x+1} = 15.2$

6. $3^{5x} = 85$

7. $x < \log_2 15$

8. $x \geq \log_3 12.3$

9. $x^{\frac{2}{3}} > 25.3$

10. $x^{0.4} = 18.9$

11. $3^{2x-2} = 2^x$

12. $4^{1-2x} = 3^{2x}$