

Solve each of the following equations or inequalities. Answers are at the bottom of this page.

1. $5^{3-2x} = 5^{-x}$

2. $2^{2m+2} < 2^{3m}$

3. $3^{2a} \geq 3^{-a}$

4. $6^{-2p} = 6^{2-3p}$

5. $4^{-x} = 64$

6. $100^{4-x} > 10^{x-1}$

7. $3^{m+1} \leq 9^{m-2}$

8. $5^{5x} = 125^{x+2}$

9. $9^{2x-5} = 27$

10. $4^{3x-6} = 8^{x+3}$

FOLD ALONG THIS LINE TO HIDE YOUR ANSWERS UNTIL YOU'RE READY TO CHECK THEM

1. $x=3$

2. $2 < m$

3. $a \geq 0$

4. $p=2$

5. $x=-3$

6. $3 > x$

7. $5 \leq m$

8. $x=3$

9. $x = \frac{13}{4}$

10. $x=7$