



Math on the Fly!



NAME: _____ DATE: _____

Solving Exponential Equations

Solve each equation.

1. $11^{3x-11} = 11$

2. $5^{x-5} = 25$

3. $4^{5x+7} = 16^{x-1}$

4. $13^{x^2} = 13^{3x}$

5. $9^{x+4} = 27^{x-3}$

6. $8^x = 32^{x+4}$

7. $7 \cdot 7^{-3} \cdot 7^{-4} = 7^{6x}$

8. $\frac{6^{8x}}{6^3} = 6^{6x} \cdot 6^5$

SOLUTIONS

1. $x = 4$

2. $x = 7$

3. $x = -3$

4. $x = 0, x = 3$

5. $x = 17$

6. $x = -10$

7. $x = -1$

8. $x = 4$