



# Exponential Equations

Version 1

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Score: \_\_\_\_\_

Direction: Solve each exponential equation. Show all your work in the space provided.

1)  $25^{x-2} = \frac{1}{5}$

2)  $\frac{1}{16^{2x+1}} = 16$

3)  $(27^{-x+3})(9^{-x+1}) = 81$

4)  $\frac{49^{5x-3}}{7^{-x-1}} = \sqrt{7}$



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Direction: Solve each exponential equation. Show all your work in the space provided.

1)  $25^{x-2} = \frac{1}{5}$

$$x = \frac{3}{2}$$

2)  $\frac{1}{16^{2x+1}} = 16$

$$x = -1$$

3)  $(27^{-x+3})(9^{-x+1}) = 81$

$$x = 7$$

4)  $\frac{49^{5x-3}}{7^{-x-1}} = \sqrt{7}$

$$x = \frac{1}{2}$$