

Name _____



Exponent Hunting

Directions: Find the missing exponent that makes each equation true. Write a positive or negative integer in each box. Do not evaluate unless it helps you find the exponent.

1) $2^{\square} = \frac{1}{8}$

2) $5^{\square} = 25$

3) $10^{\square} = \frac{1}{1000}$

4) $x^{\square} = \frac{1}{x^4}$

5) $3^{\square} = \frac{1}{9}$

6) $a^{\square} = a^6$

7) $7^{\square} = \frac{1}{7}$

8) $m^{\square} = \frac{1}{m^2}$

9) $4^{\square} = 64$

10) $b^{\square} = b^{-5}$

11) $6^{\square} = \frac{1}{216}$

12) $9^{\square} = 81$