Exponents and Logarithms

Answer Key

A) Express each equation in logarithmic form.

1) $7^2 = 49$

$\log_7 49 = 2$

2) $2^7 = 128$

$\log_2 128 = 7$

3) $4^4 = 256$

$\log_4 256 = 4$

4) $9^3 = 729$

$\log_9 729 = 3$

5) $3^4 = 81$

$\log_3 81 = 4$

6) $8^{\frac{1}{3}} = 2$

$\log_8 2 = \frac{1}{3}$

B) Express each equation in exponential form.

1) $\log_5 625 = 4$

$5^4 = 625$

2) $\log_3 243 = 5$

$3^5 = 243$

3) $\log_4 64 = 3$

$4^3 = 64$

4) $\log_{10} 1000 = 3$

$10^3 = 1000$

5) $\log_6 36 = 2$

$6^2 = 36$

6) $\log_2 32 = 5$

$2^5 = 32$