

Alg 2 Bellwork Wed, June 8, 2016

1. Write each in logarithmic form.

a) $10^2 = x$

b) $x^3 = 729$

c) $9^x = 500$

2. Write each in exponential form.

a) $\text{Log}_x 169 = 2$

b) $\text{Log}_8 x = 1$

c) $\text{Log} 3 = x$

3. Evaluate each.

a) $\text{Log}_2 8$

b) $\text{Log}_9 3$

c) $\text{Log}_{11} 11$

d) $\text{Log} 95$

e) $\text{Log}_4 1$

f) $\text{Log}_7 (7^5)$

4. Find the value of x.

$10^x = 2024$

Alg 2 Bellwork Wed, June 8, 2016

Answers

1. Write each in logarithmic form.

a) $10^2 = x$

b) $x^3 = 729$

c) $9^x = 500$

$\text{Log} x = 2$

$\text{Log}_x 729 = 3$

$\text{Log}_9 500 = x$

2. Write each in exponential form.

a) $\text{Log}_x 169 = 2$

b) $\text{Log}_8 x = 1$

c) $\text{Log} 3 = x$

$x^2 = 169$

$8^1 = x$

$10^x = 3$

3. Evaluate each.

a) $\text{Log}_2 8 = 3$

b) $\text{Log}_9 3 = \frac{1}{2}$

c) $\text{Log}_{11} 11 = 1$

$2^x = 8$

$9^x = 3 \rightarrow \sqrt{9} = 3$

$11^x = 11$

d) $\text{Log} 95$

$= 1.98$

e) $\text{Log}_4 1 = 0$

$4^x = 1$

f) $\text{Log}_7 (7^5) = 5$

$7^x = 7^5$

4. Find the value of x.

$10^x = 2024$

$\text{Log} 2024 = x$

$x = 3.31$