Makes Sense Strategies ™

MENU   sample

EXPRESSIONS

Exponential $y = ab^x$
$b>1$ = growth, $0<b<1$ = decay

Logarithms $Log_b N = P$
B = base, N = #, P = power

Common Log = base 10; log
Natural Log = base e; ln

EQUATIONS

Exponential $y = ab^x$
Take log of both sides.

Logarithms $Log_b N = P$
Write in exponential form.

Use properties while solving and simplify.

Advanced Alg/Trig Chapter 8

EXPONENTIALS AND LOGARITHMS

PROPERTIES

Product property
$log_b xy = log_b x + log_b y$

Quotient property
$log_b x / log_b y = log_b x - log_b y$

Power property
$log_b N^x = x \, log_b N$

GRAPHS

Exponential $y = ab^x$
Asymptote = x-axis, $y = 0$
y-intercept $(0,1)$

Logarithms $Log_b N = P$
Asymptote = y-axis, $x = 0$
x-intercept = $(1,0)$

For both graphs, relate to parent function and label intercepts.