



## Precalculus: Logaritmic and Exponential Functions

Name \_\_\_\_\_ Date \_\_\_\_\_

Rewrite each equation in logarithmic form

(1) 
$$3^t = n$$

$$(2) 2^p = x$$

(3) 
$$4^q = z$$

(4) 
$$6^v = n$$

(5) 
$$9^v = w$$

(6) 
$$e^w = t$$

Rewrite the following equations in exponential form

(7) 
$$log_8(w) = v$$

(8) 
$$log_7(q) = t$$

$$(9) ln(n) = z$$

$$(10) log_7(v) = u$$

$$(11) log_3(t) = z$$

$$(12) log_9(u) = v$$





## **Answers**

Rewrite each equation in logarithmic form

$$(1) 3^t = n$$

$$(2) 2^p = x$$

$$log_3(n) = t$$

$$log_2(x) = p$$

(3) 
$$4^q = z$$

(4) 
$$6^v = n$$

$$log_4(z) = q$$

$$log_6(n) = v$$

(5) 
$$9^v = w$$

(6) 
$$e^w = t$$

$$log_9(w) = v$$

$$ln(t) = w$$

Rewrite the following equations in exponential form

$$(7) \qquad log_8(w) = v$$

(8) 
$$log_7(q) = t$$

$$8^{v} = w$$

$$7^t = q$$

$$(9) ln(n) = z$$

$$(10) \qquad log_7(v) = u$$

$$e^z = n$$

$$7^u = v$$

$$(11) log_3(t) = z$$

$$(12) log_9(u) = v$$

$$3^z = t$$

$$9^v = u$$