

Name: _____

Show work needed to justify your answer.

Date: _____

HW: # 39a: Math IBSL - Standard 38 - Logarithms

5 points

1 Write each equation in exponential form:

a $\log_p q = r$

b $\log_3 5 = r$

c $\log_7 q = 6$

d $\log_p 5 = 3$

e $\log 11 = x$

2 Write each equation in logarithmic form.

a $r^s = t$

b $8^2 = 64$

c $10^x = 25$

d $3^{-2} = \frac{1}{9}$

e $27^{\frac{2}{3}} = 9$

4 Find the value of each expression:

a $\log_3 3$

b $\log_4 4$

c $\log_5 5$

d $\log_x x$

5 Find the value of each expression:

a $\log_3 9$

b $\log_2 32$

c $\log_5 125$

d $\log_4 256$

e $\log_{25} 5$

f $\log_8 2$

g $\log_3 \frac{1}{27}$