# ATHS Al Ain Female Campus <br> Mathematics Department - Term III <br> Revision Worksheet (1) - Grade 11 

| Name: | Date: |
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| Section: | Lesson(s): 8.1-8.3 |

1. Sketch the graph of the given function. Then state the function's domain and range
a) $y=-1.2(3)^{x}+2$

b) $y=2\left(\frac{4}{7}\right)^{x+2}-1$

2. Solve the given equation.
a) $2^{9 n-11}=\frac{1}{16}$
b) $6^{5 n+6}=1296$
3. Solve the given inequality
a) $11^{5 n} \leq \frac{1}{14641}$
b) $4096^{2 n}<512^{n+9}$
4. Write each equation in exponential form.
a) $\log _{4} 32=\frac{5}{2}$
b) $\quad \log _{3} \frac{1}{27}=-3$
5. Write each equation in logarithmic form.
a) $2^{9}=512$
b) $\left(\frac{1}{7}\right)^{-3}=343$
6. Evaluate the logarithmic expression.
a) $\log _{8} 32768$
b) $\quad \log _{9} \frac{1}{729}$
a) $f(x)=4 \log _{3}(x-1)$

b) $f(x)=2 \log _{4}(x+3)-2$

