1. Evaluate the following expressions:
(a) $5^{-3}$
(b) $64^{\frac{2}{3}}$
(c) $27^{\frac{2}{3}}$
(d) $\left(\frac{1}{3}\right)^{2}$
2. Suppose $g(x)=2^{x}+4$, What is $g(-1)$ ? If $g(x)=12$, what is $x$ ?
3. Determine the exponetial function whose graph is given.
(a)

(b)

4. Solve the following equations:
(a) $5^{x^{2}}=125^{x}$
(c) $e^{x}=e^{3 x+18}$
(b) $6^{x^{2}-13}=36^{6 x}$
(d) $e^{x^{2}}=e^{9 x} \cdot \frac{1}{e^{18}}$
5. Identify the graph of the equation $f(x)=2 e^{-x}$.




