Determine the equation in base $e$ to the following curves:
1.


$$
\begin{aligned}
f(x) & =-2(4)^{\frac{x-2}{2}}+4 \\
& =-2 e^{\frac{\ln 4}{2}(x-2)}+4
\end{aligned}
$$

2. 



$$
\begin{aligned}
g(x) & =3\left(\frac{5}{3}\right)^{\frac{x+1}{4}}-4 \\
& =3 e^{\frac{\ln (513)}{4}(x+1)}-4
\end{aligned}
$$

3. 



$$
\begin{aligned}
h(x) & =3\left(\frac{8}{3}\right)^{\frac{x+2}{-3}}-2 \\
& =3 e^{-\frac{\ln (813)}{3}(x+2)}-2
\end{aligned}
$$

4. 



$$
\begin{aligned}
p(x) & =-7\left(\frac{1}{7}\right)^{\frac{x+4}{8}}+5 \\
& =-7 e^{\frac{\ln (17)}{8}(x+4)}+5
\end{aligned}
$$

