Math 3H Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Per:\_\_\_

10.4 Inverse Logs and U-Substitution

Find the inverse of each function.

|  |  |
| --- | --- |
| 1. $f\left(x\right)=log\_{3}\left(3x-4\right)+1$
 | 1. $f\left(x\right)=log\_{2}\left(\frac{1}{3}x+2\right)+7$
 |
| 1. $f\left(x\right)=log\_{4}\left(1-2x\right)-3$
 | 1. $f\left(x\right)=e^{4x-5}-7$
 |
| 1. $f\left(x\right)=-2∙3^{5-2x}+1$
 | 1. $f\left(x\right)=\frac{1}{3}∙2^{3x+4}-5$
 |

Solve each equation.

|  |  |
| --- | --- |
| 1. $e^{2x}-2e^{x}-3=0$
 | 1. $e^{4x}+5e^{2x}-24=0$
 |
| 1. $3^{2x}+3^{x}-2=0$
 | 1. $2^{2x}+2^{x}-12=0$
 |
| 1. $e^{2x}-3e^{x}+2=0$
 | 1. $4^{2x}+4^{x}-20=0$
 |
| 1. $7^{2x}-7^{x}-30=0$
 | 1. $e^{2x}-10e^{x}+21=0$
 |
| 1. $5^{2x}+5^{x}-6=0$
 |  |