Algorithm – Inverse Functions

Algorithm To Find an Inverse Function

1. **GIVEN** $\quad\quad\quad\quad\quad$ **f(x) = 3x – 1**
2. Substitute y for f(x) $\quad\quad$ $y = 3x - 1$
3. Interchange the x and y $\quad$ $x = 3y - 1$

4. Solve for y $\quad\quad\quad\quad\quad$ $\dfrac{x+1}{3} = y$

5. Rewrite y using $f^{-1}(x)$ $\quad\quad$ $\dfrac{x+1}{3} = f^{-1}(x)$