15.5
4(f)

$$ax - 1 = \frac{x+1}{a}$$

$$(a)ax - 1 = \frac{x+1}{a}(a)$$

$$\begin{array}{rcl} a^2x - a & = & x + 1 \\ +a & & +a \end{array}$$

$$\begin{array}{rcl} a^2x & = & x + 1 + a \\ -x & & -x \end{array}$$

$$a^2x - x = 1 + a$$

$$x(a^2 - 1) = a + 1$$

$$\frac{x(a^2-1)}{a^2-1} = \frac{a+1}{a^2-1}$$

$$x = \frac{a+1}{(a+1)(a-1)} = \frac{1}{a-1}$$