

Section 6.6

$$\frac{1}{5x+5} = \frac{3}{x+1} - \frac{7}{5}$$

$\Rightarrow$  lcm of denominator =  $x+1$

$$= \frac{1 \times (x+1)}{5x+5} = \frac{3(x+1)}{x+1} - \frac{7(x+1)}{5}$$

$$= \frac{1(\cancel{x+1})}{5(\cancel{x+1})} = 3 - \frac{7(x+1)}{5}$$

$$\frac{1}{5} = 3 - \frac{7}{5}(x+1)$$

$$1 = 15 - 7(x+1)$$

$$1 = 15 - 7x - 7$$

$$1 = 8 - 7x$$

$$7x = 8 - 1$$

$$7x = 7$$

$$\underline{\underline{x = 1}}$$