

Solve

$$\frac{12}{1} \left(\frac{x+2}{3} \right) = \frac{12}{1} \left(\frac{3}{1} \right) - \frac{12}{1} \left(\frac{x+4}{4} \right)$$

$$4(x+2) = 36 - 3(x+4)$$

$$4x+8 = \underline{36} - 3x - \underline{12}$$

$$4x+8 = 24 - 3x$$

$$+3x \qquad \qquad \qquad +3x$$

$$\cancel{7x} + 8 = 24$$

$$-8 \qquad \qquad -8$$

$$\frac{7x}{7} = \frac{16}{7}$$

$$x = \frac{16}{7}$$