

$$\frac{x}{4} - \frac{1}{2} \left( \frac{1}{2}x + \frac{x-3}{2} - \frac{x+2}{3} - \frac{x}{4} \right) = \frac{1}{12} (1-3x) - \frac{11}{24}$$

$$\frac{x}{4} - \frac{1}{4}x - \frac{x-3}{4} + \frac{x+2}{6} + \frac{x}{8} = \frac{1}{12} - \frac{x}{4} - \frac{11}{24}$$

$$-6x + 18 + 4x + 8 + 3x = 2 - 6x - 11$$

$$7x = -35$$

$$x = -5$$