

ENSIMMÄISEN ASTEEN YHTÄLÖ

esim 1

$$\underbrace{2x}_{\text{vasen puoli}} = \underbrace{2}_{\text{oikea puoli}} \quad | :2$$

$$x = \frac{2}{2} = 1$$

ratkaisu

i i

esim 2

$$7(2x-3) = 5-x$$

$$14x - 21 = 5 - x$$

$$14x + x = 5 + 21$$

$$15x = 26 \quad | :15$$

$$x = \frac{26}{15} = 1 \frac{11}{15}$$

esim 3

$$\frac{4}{3} \frac{2x+2}{3} = \frac{3}{4} \frac{3x-1}{4} - 3$$

lajennetaan
saman-
mitoiseksi

$$\frac{4(2x+2)}{12} = \frac{3(3x-1)}{12} - \frac{36}{12} \quad | \cdot 12$$

$$\frac{\cancel{12} \cdot 4(2x+2)}{\cancel{12}} = \frac{\cancel{12} \cdot 3(3x-1)}{\cancel{12}} - \cancel{12} \cdot \frac{36}{\cancel{12}}$$

$$4(2x+2) = 3(3x-1) - 36$$

$$8x + 8 = 9x - 3 - 36$$

$$8x - 9x = -3 - 36 - 8$$

$$-x = -47 \quad | :(-1)$$

$$\underline{\underline{x = 47}}$$