

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



$$x = \frac{6}{5}$$

Check answer: replace every  $x$  with  $\frac{6}{5}$

$$\frac{\frac{6}{5}}{4} + \frac{3}{2} = \frac{2}{3} \left( \frac{6}{5} \right) + 1$$

$$\frac{6}{5} \cdot \frac{1}{4} + \frac{3}{2} = \frac{12}{15} + 1$$

↓ simplify

$$\frac{6}{20} + \frac{3}{2} = \frac{4}{5} + 1$$

↓ common denominator

$$\frac{6}{20} + \frac{30}{20} = 1 \frac{4}{5}$$

$$\frac{36}{20} = 1 \frac{4}{5}$$

$$1 \frac{16}{20} = 1 \frac{4}{5}$$

$$1 \frac{4}{5} = 1 \frac{4}{5} \quad \checkmark$$

$\frac{6}{5}$  is a solution

$$\frac{\frac{6}{5}}{4} = \frac{6}{5} \cdot \frac{1}{4}$$

reciprocal of 4