

b.2 Fractions with Common Denominators

What is a common denominator

$$\frac{7}{20} + \frac{3}{20} = \frac{10}{20} = \frac{1}{2}$$

Process

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

Sum of numerators
over the common denominator
and simplify if needed

$$\frac{1}{4} + \frac{3}{4} = \frac{1+3}{4} = \frac{4}{4} = 1$$

$$\frac{5}{7} + \frac{4}{7} = \frac{5+4}{7} = \frac{9}{7} = 1\frac{2}{7}$$

$$\frac{a}{c} - \frac{b}{c} = \frac{a-b}{c}$$

Difference of numerators
over the common denominator
and simplify if needed

$$\frac{7}{8} - \frac{1}{8} = \frac{7-1}{8} = \frac{6}{8} = \frac{3}{4}$$

$$\frac{25}{48} - \frac{9}{48} = \frac{25-9}{48} = \frac{16}{48} = \frac{1}{3}$$

$$\frac{7}{8} - \frac{1}{8} = \frac{6}{8} = \frac{3}{4}$$

$$x + \frac{1}{5} = \frac{4}{5} \quad x = \frac{3}{5}$$

find the value of x
so that the equation
is true

$$\frac{x+1}{5} = \frac{4}{5} \quad x+1 = \frac{4}{3}$$

$$x - \frac{3}{8} = \frac{1}{2} \quad \text{change 2 to 8}$$

$$x - \frac{3}{8} = \frac{4}{8} \quad \text{Rewrite}$$

$$x = \frac{7}{8}$$

$$x + \frac{4}{5} = 1\frac{2}{5} \quad \text{Rewrite as Improper}$$

$$x + \frac{4}{5} = \frac{7}{5}$$

$$x = \frac{3}{5}$$

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2-36 even