

Changing 'Un-Like' Fractions into 'Like' Fractions

F-ECD 1

Instructions: Change these 'un-like' fractions into 'like' fractions using the ECD method you learned in the video. Use the guides to help you. The first one has been done for you.

1

$$\frac{1}{2} \quad \frac{3}{5}$$

$$\frac{5}{5} \times \frac{1}{2} \quad \frac{3}{5} \times \frac{2}{2}$$

$$\frac{5}{10} \quad \frac{6}{10}$$

2

$$\frac{5}{6} \quad \frac{1}{4}$$

$$\frac{4}{4} \times \frac{5}{6} \quad \frac{1}{4} \times \frac{6}{6}$$

$$\frac{20}{24} \quad \frac{6}{24}$$

3

$$\frac{1}{3} \quad \frac{1}{4}$$

$$\frac{4}{4} \times \frac{1}{3} \quad \frac{1}{4} \times \frac{3}{3}$$

$$\frac{4}{12} \quad \frac{3}{12}$$

4

$$\frac{2}{3} \quad \frac{1}{8}$$

$$\frac{8}{8} \times \frac{2}{3} \quad \frac{1}{8} \times \frac{3}{3}$$

$$\frac{16}{24} \quad \frac{3}{24}$$

5

$$\frac{2}{7} \quad \frac{1}{2}$$

$$\frac{2}{2} \times \frac{2}{7} \quad \frac{1}{2} \times \frac{7}{7}$$

$$\frac{4}{14} \quad \frac{7}{14}$$

6

$$\frac{3}{4} \quad \frac{3}{10}$$

$$\frac{10}{10} \times \frac{3}{4} \quad \frac{3}{10} \times \frac{4}{4}$$

$$\frac{30}{40} \quad \frac{12}{40}$$

7

$$\frac{2}{3} \quad \frac{5}{6}$$

$$\frac{6}{6} \times \frac{2}{3} \quad \frac{5}{6} \times \frac{3}{3}$$

$$\frac{12}{18} \quad \frac{15}{18}$$

8

$$\frac{3}{5} \quad \frac{7}{9}$$

$$\frac{9}{9} \times \frac{3}{5} \quad \frac{7}{9} \times \frac{5}{5}$$

$$\frac{27}{45} \quad \frac{35}{45}$$

Adding 'Un-Like' Fractions Using the ECD Method

F-ECD 2

Instructions: Add these 'un-like' fractions using the ECD method you learned in the video. Use the guides to help you. You do **not** need to simplify your answers.

1

$$\frac{3}{4} + \frac{1}{5}$$

$$\frac{5}{5} \times \frac{3}{4} + \frac{1}{5} \times \frac{4}{4}$$

$$\frac{15}{20} + \frac{4}{20} = \left(\frac{19}{20}\right)$$

2

$$\frac{2}{5} + \frac{3}{8}$$

$$\frac{8}{8} \times \frac{2}{5} + \frac{3}{8} \times \frac{5}{5}$$

$$\frac{16}{40} + \frac{15}{40} = \left(\frac{31}{40}\right)$$

3

$$\frac{1}{6} + \frac{1}{3}$$

$$\frac{3}{3} \times \frac{1}{6} + \frac{1}{3} \times \frac{6}{6}$$

$$\frac{3}{18} + \frac{6}{18} = \left(\frac{9}{18}\right)$$

4

$$\frac{1}{2} + \frac{5}{8}$$

$$\frac{8}{8} \times \frac{1}{2} + \frac{5}{8} \times \frac{2}{2}$$

$$\frac{8}{16} + \frac{10}{16} = \left(\frac{18}{16}\right)$$

5

$$\frac{4}{5} + \frac{3}{8}$$

$$\frac{8}{8} \times \frac{4}{5} + \frac{3}{8} \times \frac{5}{5}$$

$$\frac{32}{40} + \frac{15}{40} = \left(\frac{47}{40}\right)$$

6

$$\frac{1}{4} + \frac{5}{7}$$

$$\frac{7}{7} \times \frac{1}{4} + \frac{5}{7} \times \frac{4}{4}$$

$$\frac{7}{28} + \frac{20}{28} = \left(\frac{27}{28}\right)$$

7

$$\frac{2}{7} + \frac{1}{3}$$

$$\frac{3}{3} \times \frac{2}{7} + \frac{1}{3} \times \frac{7}{7}$$

$$\frac{6}{21} + \frac{7}{21} = \left(\frac{13}{21}\right)$$

8

$$\frac{2}{9} + \frac{1}{7}$$

$$\frac{7}{7} \times \frac{2}{9} + \frac{1}{7} \times \frac{9}{9}$$

$$\frac{14}{63} + \frac{9}{63} = \left(\frac{23}{63}\right)$$

Subtracting 'Un-Like' Fractions Using the ECD Method

F-ECD 3

Instructions: Subtract these 'un-like' fractions using the ECD method you learned in the video. Use the guides to help you. You do **not** need to simplify your answers.

1

$$\frac{3}{4} - \frac{2}{6}$$

$$\frac{6}{6} \times \frac{3}{4} - \frac{2}{6} \times \frac{4}{4}$$

$$\frac{18}{24} - \frac{8}{24} = \frac{10}{24}$$

2

$$\frac{5}{7} - \frac{1}{2}$$

$$\frac{2}{2} \times \frac{5}{7} - \frac{1}{2} \times \frac{7}{7}$$

$$\frac{10}{14} - \frac{7}{14} = \frac{3}{14}$$

3

$$\frac{2}{3} - \frac{1}{5}$$

$$\frac{5}{5} \times \frac{2}{3} - \frac{1}{5} \times \frac{3}{3}$$

$$\frac{10}{15} - \frac{3}{15} = \frac{7}{15}$$

4

$$\frac{7}{9} - \frac{2}{3}$$

$$\frac{3}{3} \times \frac{7}{9} - \frac{2}{3} \times \frac{9}{9}$$

$$\frac{21}{27} - \frac{18}{27} = \frac{3}{27}$$

5

$$\frac{2}{6} - \frac{1}{4}$$

$$\frac{4}{4} \times \frac{2}{6} - \frac{1}{4} \times \frac{6}{6}$$

$$\frac{8}{24} - \frac{6}{24} = \frac{2}{24}$$

6

$$\frac{3}{2} - \frac{8}{9}$$

$$\frac{9}{9} \times \frac{3}{2} - \frac{8}{9} \times \frac{2}{2}$$

$$\frac{27}{18} - \frac{16}{18} = \frac{11}{18}$$

7

$$\frac{3}{5} - \frac{3}{8}$$

$$\frac{8}{8} \times \frac{3}{5} - \frac{3}{8} \times \frac{5}{5}$$

$$\frac{24}{40} - \frac{15}{40} = \frac{9}{40}$$

8

$$\frac{6}{10} - \frac{3}{8}$$

$$\frac{8}{8} \times \frac{6}{10} - \frac{3}{8} \times \frac{10}{10}$$

$$\frac{48}{80} - \frac{30}{80} = \frac{18}{80}$$

Mixed Practice Using the ECD Method

F-ECD 4

Instructions: Add or subtract these 'un-like' fractions using the ECD method you learned in the video. Show your work. You do **not** need to simplify your answers.

$$\begin{aligned} \text{1} \quad & \frac{2}{3} + \frac{1}{8} \\ & \frac{8}{8} \times \frac{2}{3} + \frac{1}{8} \times \frac{3}{3} \\ & \frac{16}{24} + \frac{3}{24} = \left(\frac{19}{24} \right) \end{aligned}$$

$$\begin{aligned} \text{2} \quad & \frac{4}{3} - \frac{5}{7} \\ & \frac{7}{7} \times \frac{4}{3} - \frac{5}{7} \times \frac{3}{3} \\ & \frac{28}{21} - \frac{15}{21} = \left(\frac{13}{21} \right) \end{aligned}$$

$$\begin{aligned} \text{3} \quad & \frac{4}{6} - \frac{1}{5} \\ & \frac{5}{5} \times \frac{4}{6} - \frac{1}{5} \times \frac{6}{6} \\ & \frac{20}{30} - \frac{6}{30} = \left(\frac{14}{30} \right) \end{aligned}$$

$$\begin{aligned} \text{4} \quad & \frac{9}{10} - \frac{1}{3} \\ & \frac{3}{3} \times \frac{9}{10} - \frac{1}{3} \times \frac{10}{10} \\ & \frac{27}{30} - \frac{10}{30} = \left(\frac{17}{30} \right) \end{aligned}$$

$$\begin{aligned} \text{5} \quad & \frac{3}{8} + \frac{3}{2} \\ & \frac{2}{2} \times \frac{3}{8} + \frac{3}{2} \times \frac{8}{8} \\ & \frac{6}{16} + \frac{24}{16} = \left(\frac{30}{16} \right) \end{aligned}$$

$$\begin{aligned} \text{6} \quad & \frac{2}{7} + \frac{5}{6} \\ & \frac{6}{6} \times \frac{2}{7} + \frac{5}{6} \times \frac{7}{7} \\ & \frac{12}{42} + \frac{35}{42} = \left(\frac{47}{42} \right) \end{aligned}$$

$$\begin{aligned} \text{7} \quad & \frac{7}{10} - \frac{3}{5} \\ & \frac{5}{5} \times \frac{7}{10} - \frac{3}{5} \times \frac{10}{10} \\ & \frac{35}{50} - \frac{30}{50} = \left(\frac{5}{50} \right) \end{aligned}$$

$$\begin{aligned} \text{8} \quad & \frac{5}{11} + \frac{2}{5} \\ & \frac{5}{5} \times \frac{5}{11} + \frac{2}{5} \times \frac{11}{11} \\ & \frac{25}{55} + \frac{22}{55} = \left(\frac{47}{55} \right) \end{aligned}$$

Mixed Practice Using the ECD Method - Set 2

F-ECD 5

Instructions: Add or subtract these 'un-like' fractions using the ECD method you learned in the video. Show your work. You do **not** need to simplify your answers.

$$\begin{aligned} \text{1} \quad & \frac{4}{5} + \frac{1}{2} \\ & \frac{2}{2} \times \frac{4}{5} + \frac{1}{2} \times \frac{5}{5} \\ & \frac{8}{10} + \frac{5}{10} = \left(\frac{13}{10} \right) \end{aligned}$$

$$\begin{aligned} \text{2} \quad & \frac{10}{12} + \frac{2}{3} \\ & \frac{3}{3} \times \frac{10}{12} + \frac{2}{3} \times \frac{12}{12} \\ & \frac{30}{36} + \frac{24}{36} = \left(\frac{54}{36} \right) \end{aligned}$$

$$\begin{aligned} \text{3} \quad & \frac{5}{3} - \frac{1}{4} \\ & \frac{4}{4} \times \frac{5}{3} - \frac{1}{4} \times \frac{3}{3} \\ & \frac{20}{12} - \frac{3}{12} = \left(\frac{17}{12} \right) \end{aligned}$$

$$\begin{aligned} \text{4} \quad & \frac{1}{9} + \frac{1}{8} \\ & \frac{8}{8} \times \frac{1}{9} + \frac{1}{8} \times \frac{9}{9} \\ & \frac{8}{72} + \frac{9}{72} = \left(\frac{17}{72} \right) \end{aligned}$$

$$\begin{aligned} \text{5} \quad & \frac{3}{10} + \frac{1}{9} \\ & \frac{9}{9} \times \frac{3}{10} + \frac{1}{9} \times \frac{10}{10} \\ & \frac{27}{90} + \frac{10}{90} = \left(\frac{37}{90} \right) \end{aligned}$$

$$\begin{aligned} \text{6} \quad & \frac{6}{7} + \frac{3}{4} \\ & \frac{4}{4} \times \frac{6}{7} + \frac{3}{4} \times \frac{7}{7} \\ & \frac{24}{28} + \frac{21}{28} = \left(\frac{45}{28} \right) \end{aligned}$$

$$\begin{aligned} \text{7} \quad & \frac{1}{4} - \frac{2}{11} \\ & \frac{11}{11} \times \frac{1}{4} - \frac{2}{11} \times \frac{4}{4} \\ & \frac{11}{44} - \frac{8}{44} = \left(\frac{3}{44} \right) \end{aligned}$$

$$\begin{aligned} \text{8} \quad & \frac{4}{7} - \frac{1}{10} \\ & \frac{10}{10} \times \frac{4}{7} - \frac{1}{10} \times \frac{7}{7} \\ & \frac{40}{70} - \frac{7}{70} = \left(\frac{33}{70} \right) \end{aligned}$$