Name _____ Date _____

1. Make like units, then add. Use an equation to show your thinking.

a) $\frac{3}{5}+\frac{1}{3}=\left(\frac{3}{5}\times\frac{3}{3}\right)+\left(\frac{1}{3}\times\frac{5}{5}\right)$

$=\frac{9}{15}+\frac{5}{15}$

$=\frac{14}{15}$

b) $\frac{3}{5}+\frac{1}{11}=\left(\frac{3}{5}\times\frac{11}{11}\right)+\left(\frac{1}{11}\times\frac{5}{5}\right)$

$=\frac{33}{55}+\frac{5}{55}$

$=\frac{38}{55}$

c) $\frac{2}{9}+\frac{5}{6}=\left(\frac{2}{9}\times\frac{2}{2}\right)+\left(\frac{5}{6}\times\frac{3}{3}\right)$

$=\frac{4}{18}+\frac{15}{18}$

$=\frac{19}{18}=1\frac{1}{18}$

d) $\frac{2}{5}+\frac{1}{4}+\frac{1}{10}=\left(\frac{2}{5}\times\frac{4}{4}\right)+\left(\frac{1}{4}\times\frac{5}{5}\right)+\left(\frac{1}{10}\times\frac{2}{2}\right)$

$=\frac{8}{20}+\frac{5}{20}+\frac{2}{20}$

$=\frac{15}{20}=\frac{3\times5}{4\times5}=\frac{3}{4}$

e) $\frac{1}{3}+\frac{7}{5}=\left(\frac{1}{3}\times\frac{5}{5}\right)+\left(\frac{7}{5}\times\frac{3}{3}\right)$

$=\frac{5}{15}+\frac{21}{15}$

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

f) $\frac{5}{8}+\frac{7}{12}=\left(\frac{5}{8}\times\frac{3}{3}\right)+\left(\frac{7}{12}\times\frac{2}{2}\right)$

$=\frac{15}{24}+\frac{14}{24}$

$=\frac{29}{24}=1\frac{5}{24}$

g) $1\frac{1}{3}+\frac{3}{4}=1+\left(\frac{1}{3}\times\frac{4}{4}\right)+\left(\frac{3}{4}\times\frac{3}{3}\right)$

$=1+\frac{4}{12}+\frac{9}{12}$

$=1+\frac{13}{12}$

$=1+1\frac{1}{12}=2\frac{1}{12}$

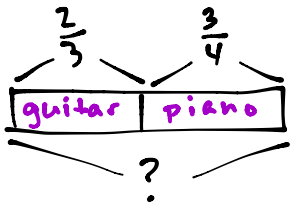
h) $\frac{5}{6}+1\frac{1}{4}=\left(\frac{5}{6}\times\frac{2}{2}\right)+1+\left(\frac{1}{4}\times\frac{3}{3}\right)$

$=\frac{10}{12}+1+\frac{3}{12}$

$=1+\frac{13}{12}$

$=1+1\frac{1}{12}=2\frac{1}{12}$

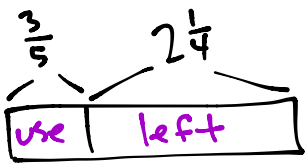
2. On Monday, Ka practices guitar for $\frac{2}{3}$ of one hour. When she's finished, she practices piano for $\frac{3}{4}$ of one hour. How much time did Ka spend practicing instruments on Monday?



$$\frac{2}{3} + \frac{3}{4} = \left(\frac{2}{3} \times \frac{4}{4}\right) + \left(\frac{3}{4} \times \frac{3}{3}\right)$$
$$= \frac{8}{12} + \frac{9}{12}$$
$$= \frac{17}{12}$$
$$= 1\frac{5}{12}$$

Ka spent $1\frac{5}{12}$ hours practicing her instruments.

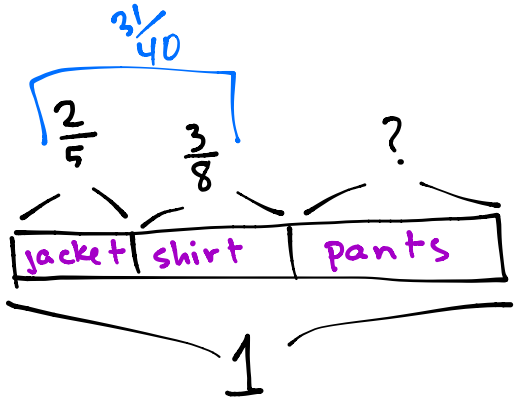
3. Ms. How buys a bag of rice to cook dinner. She used $\frac{3}{5}$ kg of rice and still had $2\frac{1}{4}$ kg left. How heavy was the bag of rice that Ms. How bought?



$$2\frac{1}{4} + \frac{3}{5} = 2 + \frac{1}{4} + \frac{3}{5}$$
$$= 2 + \left(\frac{1}{4} \times \frac{5}{5}\right) + \left(\frac{3}{5} \times \frac{4}{4}\right)$$
$$= 2 + \frac{5}{20} + \frac{12}{20}$$
$$= 2\frac{17}{20}$$

The bag of rice weighed $2\frac{17}{20}$ kg.

4. Joe spends $\frac{2}{5}$ of his money on a jacket and $\frac{3}{8}$ of his money on a shirt. He spends the rest on a pair of pants. What fraction of his money does he use to buy the pants?



$$\frac{2}{5} + \frac{3}{8} = \left(\frac{2}{5} \times \frac{8}{8}\right) + \left(\frac{3}{8} \times \frac{5}{5}\right)$$
$$= \frac{16}{40} + \frac{15}{40}$$
$$= \frac{31}{40}$$
$$1 - \frac{31}{40} = \frac{40}{40} - \frac{31}{40} = \frac{9}{40}$$

Joe spent $\frac{9}{40}$ of his money on pants.