



1) a) $\frac{5}{6} - \frac{2}{6} = \frac{3}{6}$

b) $\frac{7}{8} - \frac{3}{8} = \frac{4}{8}$

2) a) $\frac{4}{7} - \frac{2}{7} = \frac{2}{7}$



b) $\frac{6}{9} - \frac{1}{9} = \frac{5}{9}$



3) a) True.

$$\frac{3}{7} - \frac{2}{7} = \frac{1}{7}$$



b) False.

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





1) a) $\frac{5}{8} - \frac{2}{8} = \frac{1}{8} + \frac{1}{8}$

b) $\frac{10}{11} - \frac{3}{4} = \frac{3}{11} + \frac{4}{11}$

2) Francis is incorrect.

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

Francis will have $\frac{4}{6}$ left over.

3) Alexander is incorrect.

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

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



Alexander will have $\frac{3}{8}$ of the pizza left. This is under half of what he started with, which would be $\frac{4}{8}$.

4) a) These are the possible answers:

$$\frac{9}{9} - \frac{6}{9} = \frac{3}{9}$$

$$\frac{8}{9} - \frac{5}{9} = \frac{3}{9}$$

$$\frac{7}{9} - \frac{4}{9} = \frac{3}{9}$$

$$\frac{6}{9} - \frac{3}{9} = \frac{3}{9}$$

$$\frac{5}{9} - \frac{2}{9} = \frac{3}{9}$$

$$\frac{4}{9} - \frac{1}{9} = \frac{3}{9}$$

$$\frac{3}{9} - \frac{0}{9} = \frac{3}{9}$$

b) These are a few of the possible answers:

$$\frac{9}{9} - \frac{5}{9} - \frac{1}{9} = \frac{3}{9}$$

$$\frac{8}{9} - \frac{4}{9} - \frac{1}{9} = \frac{3}{9}$$

$$\frac{7}{9} - \frac{3}{9} - \frac{1}{9} = \frac{3}{9}$$



1) a) These are some of the possible answers: b)

$$\frac{7}{12} - \frac{1}{12} = \frac{1}{12} + \frac{5}{12}$$

$$\frac{7}{12} - \frac{2}{12} = \frac{1}{12} + \frac{4}{12}$$

$$\frac{7}{12} - \frac{3}{12} = \frac{1}{12} + \frac{3}{12}$$

$$\frac{7}{12} - \frac{4}{12} = \frac{1}{12} + \frac{2}{12}$$

$$\frac{7}{12} - \frac{5}{12} = \frac{1}{12} + \frac{1}{12}$$

$$\frac{15}{16} - \frac{8}{16} - \frac{1}{16} = \frac{6}{16}$$

$$\frac{16}{16} - \frac{8}{16} - \frac{2}{16} = \frac{6}{16}$$

2) These are the possible answers:

$$\frac{10}{10} - \frac{2}{10} - \frac{2}{10} - \frac{6}{10} = \frac{0}{10}$$

$$\frac{10}{10} - \frac{2}{10} - \frac{6}{10} - \frac{2}{10} = \frac{0}{10}$$

$$\frac{10}{10} - \frac{6}{10} - \frac{2}{10} - \frac{2}{10} = \frac{0}{10}$$

$$\frac{10}{10} - \frac{4}{10} - \frac{4}{10} - \frac{2}{10} = \frac{0}{10}$$

$$\frac{10}{10} - \frac{4}{10} - \frac{2}{10} - \frac{4}{10} = \frac{0}{10}$$

$$\frac{10}{10} - \frac{2}{10} - \frac{4}{10} - \frac{4}{10} = \frac{0}{10}$$

3) It is sometimes true.

An example where this statement can be true is:

$$\frac{7}{7} - \frac{2}{7} - \frac{5}{7} = \frac{0}{7}$$

An example where this statement can be false is:

$$\frac{9}{9} - \frac{2}{9} - \frac{1}{9} = \frac{6}{9}$$

4) There are a wide variety of possible answers. Subtractions include:

$$\frac{9}{9} - \frac{4}{9} = \frac{5}{9}$$

$$\frac{9}{9} - \frac{1}{9} - \frac{3}{9} = \frac{5}{9}$$

$$\frac{8}{9} - \frac{1}{9} - \frac{1}{9} - \frac{1}{9} = \frac{5}{9}$$

Additions include:

$$\frac{3}{9} + \frac{2}{9} = \frac{5}{9}$$

$$\frac{1}{9} + \frac{1}{9} + \frac{3}{9} = \frac{5}{9}$$

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