1)

a)



$$\frac{12}{20}$$
 + $\frac{4}{20}$ + $\frac{15}{20}$ + $\frac{31}{20}$ or $1\frac{11}{20}$

b)
$$\frac{8}{5} = \frac{48}{30}$$

$$\frac{6}{10} = \frac{18}{30}$$

$$\frac{16}{15} = \frac{32}{30}$$

$$\frac{48}{30} + \frac{18}{30} + \frac{32}{30} = \frac{98}{30} = 3\frac{8}{30}$$
 or $3\frac{4}{15}$

1) Amelia is wrong because fractions with larger denominators are not always larger than fractions with smaller denominators. We can solve this calculation by converting the mixed numbers to improper fractions and then simplifying before subtracting:



$$\frac{42}{8} - \frac{11}{4} = \frac{21}{4} - \frac{11}{4} = \frac{10}{4} = 2\frac{1}{2}$$

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

$$1 \quad \frac{16}{18} + \frac{10}{9} = \frac{27}{9} \quad or \quad 3$$

$$\frac{5}{4} + \frac{7}{8} = \frac{17}{8} \text{ or } 1\frac{1}{8}$$

Only $\frac{27}{9}$ gives a whole number answer when written as a mixed number.

1) Answers will vary. Example answers shown.



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

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

$$\frac{5}{4} + \frac{7}{8} = 2\frac{1}{8} \text{ or } 1\frac{1}{8}$$

$$\frac{5}{4} + \frac{7}{8} = \frac{17}{8} \text{ or } 1\frac{1}{8}$$

3) Answers will vary. Example answers shown

$$1\frac{5}{6} + 2\frac{3}{4} = 4\frac{7}{12}$$

$$3\frac{5}{4} + 1\frac{4}{5} = 5\frac{17}{8} \text{ or } 5\frac{1}{8}$$