1. Arrange in order from smallest to largest

a) $1.67,\ -1.6668,\ -1.667,\ 1.669$

-1.6668
-1.667 ← smaller overall

1.669
1.67

Answer) $-1.667,\ -1.6668,\ 1.669,\ 1.67$

b) $\frac{4}{11},\ 0.3\overline{6},\ 0.36\overline{3},\ 0.\overline{3}$

$= 0.\overline{36}$

0.333333
0.363333
~~0.366666~~
0.363636

Answer) $0.\overline{3},\ 0.36\overline{3},\ \frac{4}{11},\ 0.3\overline{6}$

2. Determine a ***fraction*** and a ***decimal*** between each pair of numbers

a) $\frac{11}{13}, \frac{7}{8}$

$\frac{11 \cdot 8}{13 \cdot 8} = \frac{88}{104} = 0.846153$

$\frac{89}{104} \approx 0.8557$

$\frac{7 \cdot 13}{8 \cdot 13} = \frac{91}{104} = 0.875$

b) $2.\overline{35},\ 2.35\overline{5}$

$2.353535\ldots$
$2.355555\ldots$

$2.354 = \frac{2354}{1000}$

3 times

3. Solve.

a) $\underline{-35.42} + 11.32 = -24.1$

$\_\_\_ = -24.1 - 11.32$

$\_\_\_ = -35.42$

b) $-16.55 + \underline{13.82} = -2.73$

$\_\_\_ = -2.73 + 16.55$

$\_\_\_ = 13.82$

4. Simplify and reduce your answer. Answer in **improper fraction form** (if needed).

a) $-\frac{19}{8} + \frac{5}{4} \cdot \frac{2}{2} = -\frac{19}{8} + \frac{10}{8}$

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

b) $-\frac{2}{3} + \left(-1\frac{2}{7}\right) = -\frac{2}{3} - \frac{1 \cdot 7 + 2}{7}$

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

$= -\frac{14}{21} - \frac{27}{21}$

$= \frac{-41}{21}$

c) $2\frac{3}{5} - 0.2 = \frac{2 \cdot 5 + 3}{5} - \frac{2}{10}$

$= \frac{13}{5} - \frac{1}{5} = \frac{12}{5}$

5. Simplify and reduce your answer. Answer in **mixed fraction form** (if needed).

a) $\frac{13}{4}-\frac{2}{3}$ $\quad \frac{3}{3}\cdot\frac{4}{4}$ $= \frac{39}{12}-\frac{8}{12}$

$= \frac{31}{12} = 2\frac{7}{12}$

$12\overline{)31}$ $\quad 2$, 24, 7

b) $\frac{15}{2}-(-1\frac{1}{10}) = \frac{15\cdot 5}{2\cdot 5}+\frac{11}{10}$

$= \frac{75}{10}+\frac{11}{10}$

$= \frac{86}{10} = \frac{43}{5} = 8\frac{3}{5}$

$5\overline{)43}$ $\quad 8$, 40, 3

c) $1\frac{1}{15}+2\frac{1}{3} = \frac{1\cdot 15+1}{15}+\frac{2\cdot 3+1}{3}$

$= \frac{16}{15}+\frac{7\cdot 5}{3\cdot 5} = \frac{16}{15}+\frac{35}{15}$

$= \frac{51}{15} = \frac{17}{5} = 3\frac{2}{5}$

$5\overline{)17}$ $\quad 3$, 15, 2

6. Mr. G needs $5\frac{1}{3}$ cups of flour in total to make baked goods for the staff party. He needs $2\frac{3}{4}$ cups for cookies, $1\frac{1}{2}$ cups for a cake, and the rest for donuts. How much flour is Mr. G using for donuts? *(Answer in mixed form)*

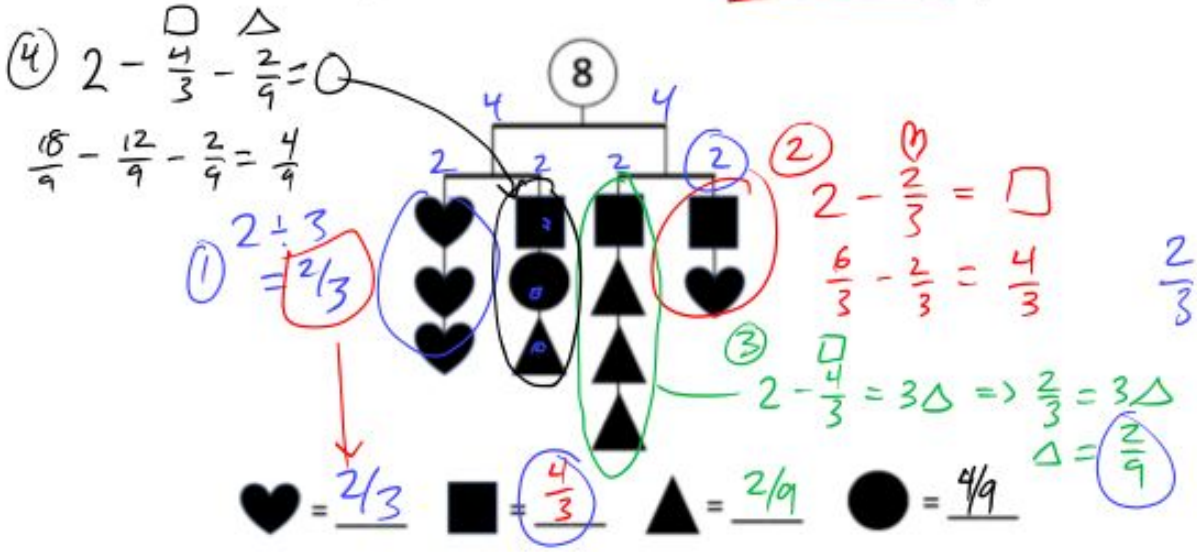
$5\frac{1}{3} - 2\frac{3}{4} - 1\frac{1}{2} = \frac{16\cdot 4}{3\cdot 4}-\frac{11\cdot 3}{4\cdot 3}-\frac{3\cdot 6}{2\cdot 6} = \frac{64}{12}-\frac{33}{12}-\frac{18}{12}$

total $\quad -\quad -$

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

$12\overline{)13}$ $\quad 1$, 12, 1

7. Find the value of each shape to make the mobile balance (answer with fractions).



④ $2-\square-\triangle=0$

$\frac{18}{9}-\frac{12}{9}-\frac{2}{9}=\frac{4}{9}$

① $2\div 3 = \frac{2}{3}$

② $2-\frac{2}{3}=\square$

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

$\frac{2}{3}\div 3 = \frac{2}{3}\times\frac{1}{3}$

③ $2-\frac{4}{3}=3\triangle \Rightarrow \frac{2}{3}=3\triangle$

$\triangle=\frac{2}{9}$

♥ = 2/3 $\quad$ ■ = 4/3 $\quad$ ▲ = 2/9 $\quad$ ● = 4/9