Operations with Signed Fractions and Decimals

Example 1: **Compute** $\frac{1}{3}+\left(-\frac{9}{20}\right)$

Solution: When adding a positive number and a negative number, subtract the values and the number further from zero determines the sign.

$$\frac{1}{3}+-\frac{9}{20}=\frac{1}{3}\cdot\frac{20}{20}+-\frac{9}{20}\cdot\frac{3}{3}=\frac{20}{60}+-\frac{27}{60}=-\frac{7}{60}$$

Example 2: **Compute** $-1.25+3.90=2.65$

Solution: Change any subtraction problem to "addition of the opposite" and then follow the addition process.

$$-1.25-(-3.9)\Rightarrow-1.25+3.9=-1.25+3.90=2.65$$

1. $-\frac{2}{3}+\frac{1}{2}$

2. $\frac{3}{4}-\left(-\frac{5}{12}\right)$

3. $-\frac{5}{7}+\frac{2}{3}$

4. $-1\frac{6}{7}+\left(-\frac{3}{4}\right)$

25. $-3.4+(-32.65)$

26. $-7.5-14.93$

answers on next page...

1) $-\frac{1}{6}$

2) $1\frac{1}{6}$

3) $-\frac{1}{21}$

4) $-2\frac{17}{28}$

25) -36.05

26) -22.43