Order of Operations on Numbers and Fractions Part I

1. Simplify using order of operations as shown below.

Example: $15 \div (9 - 6) + 4 \times 2$
$= 15 \div 3 + 4 \times 2$
$= 5 + 8$
$= 13$

Step I:	Parentheses
Step II:	Division
Step III:	Multiplication
Step IV:	Addition
Step V:	Subtraction

Divide or multiply in order from left to right,
then add or subtract in order from left to right.
In using order of operations do the operations inside parentheses first.

a. $6 + 49 - 21 \div 3$

b. $6 \times 3 + 2 - (9 - 3)$

c. $36 \div 6 \times 4 + 2 - 8$

d. $56 \div 7 - (2 \times 3) + 15$

e. $\frac{1}{4} \times \frac{1}{5} + \frac{2}{10} \times \frac{1}{2}$

f. $\frac{3}{8} \times (\frac{1}{6} + \frac{5}{6})$

Order of Operations on Numbers and Fractions Part II

2. Simplify the following.

a. $(25 \div 5 + 5) + 3 \times 4$

b. $15 + (24 \div 6) - 3 \times 4$

c. $8 \times 1\frac{1}{2} - 10 \times \frac{1}{5}$

d. $\frac{3}{5} \times 20 + 1\frac{1}{3} \times 12$

e. $(\frac{5}{7} - \frac{1}{14}) \div 3$

f. $\frac{1}{5} + \frac{1}{10} \times 4$

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

h. $1 - (\frac{1}{4} + \frac{1}{5})$

i. $5\frac{3}{4} - 1\frac{1}{2} - \frac{3}{8}$

j. $7\frac{1}{5} - (2\frac{1}{10} + \frac{4}{15})$