1. Add: $3\frac{1}{9} + 3\frac{3}{4} = \frac{28}{9} + \frac{15}{4} = \frac{28\times 4 + 15\times 9}{36} = \frac{112 + 135}{36} = \frac{247}{36} = 6\frac{31}{36}$

2. Subtract: $-\frac{4}{5} - (-\frac{3}{5}) = -\frac{4}{5} + \frac{3}{5} = \frac{-4+3}{5} = \frac{-1}{5}$

3. Multiply: $\frac{1}{9} \times 3\frac{3}{4} = \frac{1}{9} \times \frac{15}{4} = \frac{3\cdot 5}{3\cdot 3\cdot 4} = \frac{5}{12}$

4. Divide: $\frac{-1}{5} \div 8 = \frac{-1}{5} \times \frac{1}{8} = \frac{-1}{40}$

Add: $\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$

Hint: Choose numbers for each variable to see how to solve the problem. Write your final answer in terms of a, b, and c.

Subtract: $\frac{w}{x} - \frac{y}{z} = \frac{wz - yx}{xz}$

Hint: Choose numbers for each variable to see how to solve the problem. Write your final answer in terms of w, x, y and z.

Multiply: $\frac{q}{r} \times \frac{s}{t} = \frac{qs}{rt}$

Hint: Choose numbers for each variable to see how to solve the problem. Write your final answer in terms of q, r, s, and t.

Divide: $\frac{q}{r} \div \frac{s}{t} = \frac{q}{r} \times \frac{t}{s} = \frac{qt}{rs}$

Hint: Choose numbers for each variable to see how to solve the problem. Write your final answer in terms of q, r, s, and t.