Goldentail Presents LCD's and Polar Primes

Finding the LCD of three or more fractions can be trickier than finding a polar bear in a snowstorm! Follow the steps below and learn how to use prime factorization to make the job easier.

	EXAMPLE $\frac{7}{12} + \frac{5}{18} + \frac{1}{20}$
1. Prime factorize the denominators.	$\frac{7}{2 \times 2 \times 3} + \frac{5}{2 \times 3 \times 3} + \frac{1}{2 \times 2 \times 5}$
2. Find the largest group of each prime factor and circle it.	$\frac{7}{(2 \times 2) \times 3} + \frac{5}{2 \times (3 \times 3)} + \frac{1}{2 \times 2 \times (5)}$
3. Multiply all of the circled groups together; this is the LCD.	LCD = 2 x 2 x 3 x 3 x 5 = 180
4. Find the equivalent form of each fraction with the LCD as the denominator.	$\frac{7 \times 15}{12 \times 15} + \frac{5 \times 10}{18 \times 10} + \frac{1 \times 9}{20 \times 9}$
5. Solve the problem and reduce the answer if necessary.	$\frac{105}{180} + \frac{50}{180} + \frac{9}{180} = \frac{164}{180} = \frac{41}{45}$

Following the steps above, do the problems below! Write each final reduced answer in the polar bear below its problem.

❶ $8/15 + 9/20 + 5/6 =$

❷ $8/9 + 1/6 - 1/4 =$

❸ $13/14 - 6/35 - 3/10 =$

❹ $3/4 - 4/7 + 1/3 =$