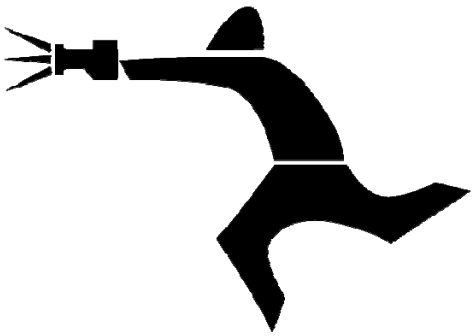
PEMDAS with Fractions Lesson



Simplify: $9 - \frac{3}{4} + \frac{2}{3}(4)$

Explanation: $9 - \frac{3}{4} + \frac{2}{3}(4)$

We realize right away that this is an order of operations problem. We have 3 operations in this problem:

$$9 - \frac{3}{4} \quad + \quad \frac{2}{3}(4)$$

From left to right: a)sub. b)add. C)multiply

Knowing our order of operations as PEMDAS , we would proceed in this order: MAS

Multiplication – addition – subtraction

Step 1 (Multiplication) - $9 - \frac{3}{4} + \frac{2}{3} \bullet \frac{4}{1}$

$$9 - \frac{3}{4} + \frac{8}{3}$$

Step 2 (Addition) - $9 - \frac{9}{12} + \frac{32}{12}$ (Find common denominators)

$$9 - \frac{41}{12}$$

Step 3 (Subtraction) - $\frac{108}{12} - \frac{41}{12}$ (Find common denominators)

$$\frac{67}{12} = 5\frac{7}{12}$$