

Challenge is the new comfort zone. We love a challenge.



Simplify. Show all work! Don't use a calculator to answer these; you need to understand the process.

1. In an auditorium, $\frac{1}{6}$ of the students are fifth graders, $\frac{1}{3}$ are fourth graders, and $\frac{1}{4}$ of the remaining students are second graders. If there are 96 students in the auditorium, how many second graders are there?

Show your thinking with a diagram.

2. You decide to dye your hair various colors for Halloween. If you dye $\frac{1}{3}$ of it blue, $\frac{1}{4}$ pink, and $\frac{1}{4}$ black, how much of your original hair color is left? Show your thinking with a diagram.

(Mrs. Bagley does not recommend actually doing this.)

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

4. $-1\frac{3}{4} + (-3\frac{3}{4})$

5. $-1\frac{7}{8} + (-3\frac{1}{2})$

6. $-2\frac{7}{8} + (-1\frac{1}{2})$

7. $-2\frac{5}{6} - (-1\frac{1}{4})$

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

9. $1\frac{2}{5} - (-3\frac{3}{4})$

10. $2\frac{4}{5} - \frac{5}{8}$