

Name: _____

Date: _____

Math 8 Section 2.6b Combined Operations with Fractions Part 2

1. Evaluate the following and show all your steps. Simplify the expression into lowest terms:

a) $\left(\frac{2}{3} - \frac{3}{4}\right)^2 \times \frac{24}{5}$	b) $\frac{1}{2} \times \frac{2}{3} \times \frac{3}{4} \times \frac{4}{5} \times \frac{5}{6}$	c) $\left(\frac{1}{2} + \frac{2}{3} - \frac{3}{4} + \frac{4}{5}\right) \times \frac{20}{3}$
d) $\frac{1}{5} \times \frac{15}{4} \div \left(\frac{1}{6} + \left(\frac{3}{4}\right)^2 - \frac{1}{2}\right)$	e) $\left(\left(\frac{1}{3}\right)^2 \times \frac{16}{9}\right) \div \left(\frac{1}{6} + \frac{3}{4} - \frac{7}{8}\right)$	f) $\left(\left(\frac{2}{3}\right)^2 - \frac{4}{9}\right) \times \left(\frac{4}{9} \times \frac{11}{8} + \frac{3}{5}\right)$
g) $\left(\frac{7}{8} - \frac{1}{2} \div \left(\frac{8}{9} + \frac{1}{9}\right)^2\right) \times \frac{3}{4}$	h) $\left(\frac{3}{4} + \frac{2}{3} - \frac{1}{3}\right) \div \left(\frac{5}{6}\right)^2 \times \frac{1}{8}$	i) $\left(\frac{1}{8} + \frac{5}{6} - \left(\frac{1}{3}\right)^2 \times \frac{3}{2}\right) \div \frac{1}{4}$

2. Express in simplest form:

i)
$$\frac{\frac{4}{5} + \frac{2}{3}}{\frac{1}{3} \times \frac{22}{45}}$$

ii)
$$\left(\frac{\frac{2}{3} \div \frac{3}{4}}{1\frac{5}{6}} \right) \left(\frac{2\frac{1}{5} \times 3}{3\frac{1}{5}} \right)$$

3. Jason purchased $3\frac{1}{4}$ pounds of cheese. He used half of the purchased cheese for a casserole and $\frac{1}{4}$ pound for sandwiches. How many pounds of cheese does he have left?
4. A 50lb block of cheese is cut into $1\frac{1}{4}$ lb blocks. Each $1\frac{1}{4}$ lb block can sell for \$4.25 each. How much money can you make with the 50lb block?
5. There is a box of chocolates and one person eats one-fourth of the pieces and another person eats one-half of the remaining pieces. If there are now six pieces left, then how many pieces were originally in the box?
6. Jerry has 144 pieces of candy. When he returned home, his sister took $\frac{1}{4}$ of the candy. Then his mother removed $\frac{1}{3}$ of what was left. When Jerry wasn't looking, his dog ate $\frac{3}{8}$ of what was left. What fraction of the original amount did Jerry end up with in his bag?