

Name: _____

Date: _____

Math 8 Section 2.6 Combined Operations with Fractions

1. Evaluate the following. Simplify the expression into lowest terms:

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| a) $\frac{5}{2} \times \frac{4}{15} + \frac{1}{2}$ | b) $\frac{15}{14} \times \frac{21}{36} - \frac{2}{3}$ | c) $\frac{1}{3} - 2\frac{2}{3} \times 5\frac{1}{4}$ | d) $\frac{35}{36} \div \frac{49}{48} - \frac{2}{7}$ |
| e) $\frac{2}{3} + \frac{6}{7} \div \frac{18}{14} - \frac{1}{2}$ | f) $\frac{16}{21} \times \frac{30}{24} \times \frac{27}{18} \div \frac{9}{14}$ | g) $\frac{64}{9} \times \frac{27}{32} \times \frac{24}{45} \div \frac{48}{18}$ | h) $\frac{9}{10} - \frac{3}{5} \times \frac{15}{2} + \frac{2}{5}$ |
| i) $\frac{7}{8} \times \frac{2}{7} + 2\frac{1}{4} \times \frac{8}{9}$ | j) $\frac{\frac{1}{2} - \frac{1}{3}}{\frac{1}{4}}$ | k) $\frac{\frac{2}{3} - \frac{2}{5}}{\frac{3}{2}}$ | l) $\frac{2}{3} \div \left(\frac{1}{21} + 1\frac{2}{3} \right)$ |
| m) $3\frac{2}{3} - \left(-1\frac{3}{5} \right) \times \left(\frac{10}{6} \right)$ | n) $\frac{1}{2} - \frac{2}{3} \times \frac{6}{14} - \frac{2}{3}$ | o) $\left(\frac{2}{3} \right)^2 \div \frac{8}{9} - \left(\frac{2}{3} + \frac{5}{6} \right)$ | p) $3\frac{1}{5} \times 6\frac{1}{4} \div 13\frac{1}{3}$ |

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| $q) \left(3\frac{2}{5} - 1\frac{2}{10} \right)^2 - \frac{2}{3}$ | $r) \left(\frac{3}{2} + 2\frac{5}{8} \right) \times 1\frac{13}{3}$ | $s) \frac{\left(2\frac{1}{2} + 3\frac{3}{4} \right) \times \frac{8}{50}}{\frac{2}{5}}$ |
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2. The L.A. Lakers play an 84 game season. They lost $\frac{3}{7}$ of their games in the first half of the season and $\frac{5}{14}$ of their games in the second half of the season. How many games did they lose?
3. A computer company manufacturers and delivers computer chip. The chips are packaged in boxes that are cubes with edge length 25cm. The cost of the chips is \$16/cm³, and delivery costs \$80 per 25km. One customer orders 120 boxes of wood chips and she lives 750 km from the supplier. The expression for the cost in dollars is: $\frac{80 \times 750}{25} + 625 \div 100000 \times 16 \times 120$ How much is the cost?
4. Jacob scored 85%, 90%, and 74% on his first three tests. Then he scored 99%, 84% and 75% on his next three tests. What is the difference in the average of the first three tests compared to the last three tests?
5. Larry watched one television program for $\frac{1}{3}$ of an hour and then watched another program for 15 min. For what fraction of an hour did Larry watch television?
6. Keon baked a wild blueberry upside-down cobbler. Shawnie ate $\frac{1}{6}$ of the cobbler. Iris ate $\frac{1}{5}$ of what was left. Chan ate $\frac{1}{4}$ of what was left after that. Cami ate $\frac{1}{3}$ of what was left after that. Demi ate $\frac{1}{2}$ of what was left after that. How much of the original cobbler remained?