

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Math 8 Section 6.6 Combined Operations with Fractions**

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

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) $3\frac{1}{5} \times 6\frac{1}{4} \div 13\frac{1}{3}$

$q) \left( 3\frac{2}{5} - 1\frac{2}{10} \right)^2 - \frac{2}{3}$	$r) \left( \frac{3}{2} + 2\frac{5}{8} \right) \times 1\frac{13}{3}$	$s) \frac{\left( 2\frac{1}{2} + 3\frac{3}{4} \right) \times \frac{8}{50}}{\frac{2}{5}}$
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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/cm<sup>3</sup>, 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. Keydon 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?