

Notes there are more than one ways to do some of the questions. If you got the right answer and can justify each step you took, don't worry if our procedures are different.



Math 6
Spring Break Problem Set Day 1
March 14, 2017

Name and section: Key.

1. Calculation. Make sure to simplify your final answers.

$$(a) \frac{8}{2} = \frac{1+8}{2} = \frac{9}{2}$$

$$(b) \frac{3}{1} + \frac{6}{5} = \frac{15+6}{5} = \frac{21}{5}$$

$$(c) \frac{1}{2} + \frac{9}{9} = \frac{1+2}{2} = \frac{3}{2}$$

$$(d) \frac{1}{10} + \frac{9}{3} = \frac{1+30}{10} = \frac{31}{10}$$

$$(e) \frac{7}{8} + \frac{6}{5} = \frac{35+48}{40} = \frac{83}{40}$$

$$(f) \frac{3}{7} + \frac{0}{1} = \frac{3}{7}$$

$$(g) \frac{9}{8} + \frac{9}{1} = \frac{9+72}{8} = \frac{81}{8}$$

$$(h) \frac{3}{8} - \frac{1}{8} = \frac{2}{8} = \frac{1}{4}$$

$$(i) \frac{6}{1} - \frac{4}{1} = 6-4=2$$

$$(j) \frac{1}{6} - \frac{7}{5} = \frac{5-42}{30} = -\frac{37}{30}$$

$$(k) \frac{5}{1} - \frac{10}{10} = 5-1=4$$

$$(l) \frac{9}{2} - \frac{0}{1} = \frac{9}{2}$$

$$(m) \frac{1}{1} - \frac{1}{6} = \frac{6-1}{6} = \frac{5}{6}$$

$$(n) \frac{6}{7} - \frac{12}{3} = \frac{18-14}{21} = \frac{4}{21}$$

2. Calculation. Make sure to simplify your final answer.

$$(a) \frac{10}{6} \times \frac{0}{9} = 0$$

$$(b) \frac{4}{2} \times \frac{3}{5} = \frac{12}{5}$$

$$(c) \frac{7}{6} \times \frac{4}{4} = \frac{7}{6}$$

$$(d) \frac{7}{1} \times \frac{1}{5} = \frac{7}{5}$$

$$(e) \frac{15}{4} \times \frac{9}{4} = \frac{45}{16}$$

$$(f) \frac{8}{5} \times \frac{2}{3} = \frac{16}{15}$$

$$(g) \frac{1}{4} \times \frac{21}{105} = \frac{1}{20}$$

$$(h) \frac{9}{5} \div \frac{3}{3} = \frac{9}{5} \div 1 = \frac{9}{5}$$

$$(i) \frac{1}{2} \div \frac{8}{7} = \frac{1}{2} \times \frac{7}{8} = \frac{7}{16}$$

$$(j) \frac{6}{1} \div \frac{1}{5} = \frac{6}{1} \times \frac{5}{1} = 30$$

$$(k) \frac{10}{6} \div \frac{7}{9} = \frac{10}{6} \times \frac{9}{7} = \frac{15}{7}$$

$$(l) \frac{7}{6} \div \frac{8}{6} = \frac{7}{6} \times \frac{6}{8} = \frac{7}{8}$$

$$(m) \frac{2}{1} \div \frac{7}{8} = 2 \times \frac{8}{7} = \frac{16}{7}$$

$$(n) \frac{2}{5} \div \frac{5}{4} = \frac{2}{5} \times \frac{4}{5} = \frac{4}{25}$$