

Grade 7/8 Math Fractions Pretest

Name: _____ Class: _____

40 Marks

Part 1. Add the following fractions.

(8 marks)

$$\frac{3}{5} + \frac{4}{4} = \frac{3}{5} + \frac{3}{5} = \frac{12}{20} + \frac{15}{20}$$
 must make common denominator

$$\frac{12}{20} + \frac{15}{20} = \frac{27}{20}$$
 Just add denominators when common denominators

$$\frac{27}{20} = 1 \frac{7}{20}$$
 improper to mixed

$$2 \frac{1}{2} + 2 \frac{2}{7} = \frac{5}{2} + \frac{16}{7}$$
 mixed to improper

$$= \frac{35}{14} + \frac{32}{14}$$
 now make common denominators

$$= \frac{67}{14}$$
 improper to mixed

$$= 4 \frac{11}{14}$$
 1-14
 2-28
 3-42
 4-56

$$\frac{67}{14} = 4 \frac{11}{14}$$
 67
 -56
 11 remainder

Part 2. Subtract the following Fractions.

(8 marks)

$$3 \frac{3}{8} - 2 \frac{1}{2} = \frac{27}{8} - \frac{5}{2}$$
 make improper

$$= \frac{27}{8} - \frac{20}{8}$$
 make common denominator

$$= \frac{7}{8}$$

$$2 \frac{3}{7} - 1 \frac{2}{5} = \frac{17}{7} - \frac{7}{5}$$
 make improper

$$= \frac{85}{35} - \frac{49}{35}$$

$$= \frac{36}{35}$$

$$= 1 \frac{1}{35}$$
 7x5
 -49
 36

Part 3. Multiply the following fractions

(8 marks)

$$1\frac{2}{5} \times \frac{5}{7} = \frac{2}{7}$$

cross cancel

or multiply = $\frac{10}{35}$
then reduce = $\frac{2}{7}$

$$1\frac{1}{8} \times 2\frac{10}{12} = \frac{3}{4} \times \frac{3}{2}$$

cross cancel

$$= \frac{51}{16}$$

1-16
2-32
3-48

$$= 3\frac{3}{16}$$

Part 4. Divide the following fractions

(8 marks)

$$5\frac{1}{2} \div 1\frac{5}{6} = \frac{11}{2} \div \frac{11}{6}$$

improper

$$= \frac{11}{2} \times \frac{6}{11}$$

cross cancel

$$= \frac{3}{1}$$

switch to multiply and flip second fraction

$$4\frac{4}{12} \div 3\frac{1}{4} = 4\frac{1}{3} \div 3\frac{1}{4}$$

reduce to simplify

$$= \frac{13}{3} \div \frac{13}{4}$$

improper

$$= \frac{13}{3} \times \frac{4}{13}$$

flip and

$$= \frac{4}{3}$$

multiply straight across
make mixed

$$= 1\frac{1}{3}$$