

Study Guide for Big Fractions Test

Name: Key
 Period: _____

Date: 10-17-2016

Directions: Solve each problem. Show your work below each problem. Answers must be in **SIMPLEST** form. Circle your final answer.

1. $\frac{5}{6} \div \frac{3}{5} = \frac{15 \div 15}{30 \div 15} = \frac{1}{2}$

2. $\frac{2}{3} \div \frac{1}{6} =$

K S F

$\frac{2}{3} \times \frac{6}{1} = \frac{12}{3} = 4$

or
 Cross Cancel $\frac{2}{3} \times \frac{6}{1} = \frac{4}{1} = 4$

3. $\frac{7}{1} \div \frac{4}{9} = \frac{28}{9} = 3 \frac{1}{9}$

4. $\frac{9}{10} \div \frac{3}{5} =$

K S F

$\frac{9}{10} \times \frac{5}{3} = \frac{45}{30} = 1 \frac{15 \div 15}{30 \div 15} = 1 \frac{1}{2}$

or
 Cross Cancel $\frac{9}{10} \times \frac{5}{3} = \frac{15}{10} = 1 \frac{5 \div 5}{10 \div 5} = 1 \frac{1}{2}$

5. $2 \frac{3}{4} \div 2 \frac{1}{5} =$

$\frac{11}{4} \div \frac{11}{5} =$

K S F

$\frac{11}{4} \times \frac{5}{11} = \frac{55}{44} = 1 \frac{11 \div 11}{44 \div 11} = 1 \frac{1}{4}$

or
 Cross Cancel $\frac{11}{4} \times \frac{5}{11} = \frac{5}{4} = 1 \frac{1}{4}$

6. $1 \frac{5}{6} \cdot 1 \frac{1}{8} =$

$\frac{11}{6} \times \frac{9}{8} = \frac{99}{48} = 2 \frac{3 \div 3}{48 \div 3} = 2 \frac{1}{16}$

or
 Cross Cancel $\frac{11}{6} \cdot \frac{9}{8} = \frac{33}{16} = 2 \frac{1}{16}$

Convert the improper fraction to a mixed number fraction.

$$\frac{17}{5}$$

First divide the numerator by the denominator.

$$17 \div 5 = 3 \text{ r}2$$

$$3 \frac{2}{5}$$

The 3 is your whole number. While the remainder become the numerator.

$$3 \frac{2}{5}$$

Your denominator stays the same. And now you have your mixed number.

Ex) $\frac{24}{7} = 3 \frac{3}{7}$

1) $\frac{55}{8} = 6 \frac{7}{8}$

2) $\frac{17}{8} = 2 \frac{1}{8}$

3) $\frac{43}{7} = 6 \frac{1}{7}$

4) $\frac{17}{2} = 8 \frac{1}{2}$

5) $\frac{5}{3} = 1 \frac{2}{3}$

Convert the mixed number fraction to improper fraction.

$$3 \frac{2}{5}$$

First multiply the denominator times the whole number.

$$5 \times 3 = 15$$

$$3 \frac{17}{5}$$

Next, add your answer from step 1 to your numerator.

$$15 + 2 = 17$$

$$\frac{48}{90} = \frac{17}{5}$$

Get rid of your whole number. And now you have your improper fraction.

Ex) $4 \frac{3}{4} = \frac{19}{4}$

1) $5 \frac{6}{8} = \frac{46}{8}$

2) $8 \frac{2}{3} = \frac{26}{3}$

3) $8 \frac{7}{8} = \frac{71}{8}$

4) $5 \frac{1}{2} = \frac{11}{2}$

5) $3 \frac{2}{4} = \frac{14}{4}$

Reduce each fraction as much as possible.

Ex) $\frac{3}{12} = \frac{1}{4}$

1) $\frac{20 \div 4}{32 \div 4} = \frac{5}{8}$

2) $\frac{10 \div 5}{15 \div 5} = \frac{2}{3}$

3) $\frac{8 \div 8}{16 \div 8} = \frac{1}{2}$

4) $\frac{56 \div 8}{64 \div 8} = \frac{7}{8}$

5) $\frac{9 \div 9}{27 \div 9} = \frac{1}{3}$