Division of a Fraction by Another Fraction

A. Fill in the Blanks

1. To divide a fraction by another fraction, you multiply the first fraction by the _____ of the second fraction.

2. The reciprocal of 95_{59} is _____.

3. Before dividing mixed numbers, you must first convert them into _____ fractions.

4. The problem $78÷23_{87÷32}$ is equivalent to the multiplication problem _____.

5. Another name for the reciprocal is the multiplicative _____.

B. Match the Following;

Column A (Problem)	Column B (Multiplication)
1. $45÷23_{54÷32}$	A. $114×15_{411×51}$
2. $234÷52_{43÷5}$	B. $45×32_{54×23}$
3. $79÷103_{97÷310}$	C. $52×31_{25×13}$
4. $212÷132_{21÷31}$	D. $79×310_{97×103}$

C. Practice Problems

1. $58÷34=85÷43=$

2. $710÷25=107÷52=$

3. $89÷23=98÷32=$

4. $45÷815=54÷158=$

5. $73÷29=37÷92=$ (Improper Fraction)

D. Warm-up Questions

1. $12÷14=21÷41=$

2. $25÷15=52÷51=$

3. $34÷12=43÷21=$

4. $59÷23=95÷32=$

5. $13÷34=31÷43=$

E. Challenge Questions

1. $313÷212=331÷221=$
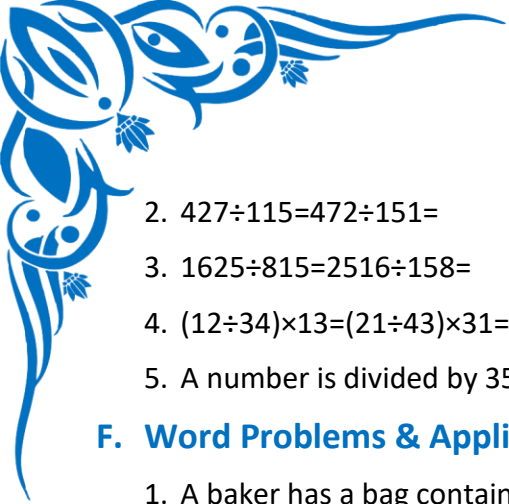
2. 427÷115=472÷151=

3. 1625÷815=2516÷158=

4. (12÷34)×13=(21÷43)×31=

5. A number is divided by 3553. The result is 212221. What is the number?

F. Word Problems & Application

1. A baker has a bag containing 4124_{21} cups of flour. If a recipe for one batch of cookies requires 3443 of a cup of flour, how many full batches of cookies can the baker make?

2. A ribbon is 5135_{31} meters long. How many pieces of ribbon, each 23_{32} of a meter long, can be cut from it?

3. The area of a rectangular garden is 1516_{1615} square meters. If its width is 34_{43} of a meter, what is its length? (Hint: Area = Length × Width)

4. Leo ran a total of 6346_{43} miles over several days. If he ran 1181_{81} miles each day, how many days did he run?

5. How many 38_{83}-pound servings of trail mix can be made from a large 66-pound bag?

G. True or False

1. To solve $56÷13_{65÷31}$, you calculate $65×13_{56×31}$.

2. The reciprocal of the whole number 7 is 71_{17}.

3. When you divide 10 by a proper fraction like 12_{21}, the answer will be smaller than 10.

4. $212÷112=22_{21}÷1_{21}=2$.

5. To divide fractions, you must first find a common denominator.