Reciprocals - Step-by-Step Lesson

a. Give the reciprocal for the following fraction:

 $\frac{2}{5}$



b. Write the reciprocal of the following mixed number:

 3_{4}^{3}

Explanation:

A reciprocal of a fraction is just when the numerator and denominator switch places.

A normal fraction is set up like this: Numerator

Denominator

The reciprocal of that fraction would be: <u>Denominator</u>

Numerator

- a. We would just flip the numerator and denominator: $\frac{2}{5}$ that would equal $\frac{5}{2}$
- b. We would follow the same pattern, but we would first convert the mixed number to an improper fraction:

$$3_4^3 = \frac{15}{4}$$

Now take the reciprocal of $\frac{15}{4}$ by flipping the numerator and denominator $\frac{4}{5}$.



Grade 5 Math Word Problems Worksheet

Read and answer each question. Show your work!

Adding and Subtracting Fractions Word Problems #2

Adding and Subtracting Fractions Word Problems #2	
1. There is 3/8 of a pizza in one box and 1/4 of a pizza in another box. How much do you have altogether?	
2. 1/10 of the M&M's in a bag are red and 1/5 are blue. What fraction of a the M&M's are red and blue?	all
3. Susan swims a race in 29 3/10 seconds. Patty swims the race in 33 9/10 seconds. How much faster was Susan than Patty?	
4. A pitcher contains 2 3/4 pints of orange juice. After you pour 5/8 of a pint into a glass, How much is left in the pitcher?	

5. Jackie has 1/3 of a Hershey bar. Steven has 4/12 of a Hershey bar.

How much do they have together?

Find the reciprocal to make each equation true.

Ex)
$$\frac{3}{6} \times \frac{6}{3} = 1$$

1)
$$\frac{1}{2} \times = 1$$

Ex)
$$\frac{3}{6} \times \frac{6}{3} = 1$$

1)
$$\frac{1}{2} \times = 1$$

= 1

2) 2/₈ ×

3)
$$14/_{6} \times = 1$$

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

5)
$$9_{10} \times = 1$$

6)
$$9/7 \times = 1$$

7)
$$5 \times = 1$$

8)
$$12/_{9} \times = 1$$

10)
$$15/10 \times = 1$$

11)
$$25/_{9} \times = 1$$

12)
$$13/_{7} \times = 1$$

14)
$$\frac{2}{10} \times = 1$$

16)
$$7 \times = 1$$

17)
$$10/_{7} \times = 1$$

18)
$$\frac{7}{8} \times = 1$$



Multiplying fractions (denominators 2-12)

Grade 5 Fractions Worksheet

Find the product.

1.
$$\frac{5}{7} \times \frac{2}{3} =$$

2.
$$\frac{1}{2} \times \frac{4}{8} =$$

3.
$$\frac{9}{10} \times \frac{1}{4} =$$

4.
$$\frac{2}{9} \times \frac{5}{7} =$$

$$\frac{6}{11} \times \frac{5}{12} =$$

6.
$$\frac{5}{6} \times \frac{1}{3} =$$

7.
$$\frac{8}{10} \times \frac{10}{12} =$$

8.
$$\frac{4}{6} \times \frac{1}{5} =$$

9.
$$\frac{4}{5} \times \frac{1}{10} =$$

$$10. \frac{2}{4} \times \frac{10}{11} =$$

11.
$$\frac{4}{9} \times \frac{5}{6} =$$

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

13.
$$\frac{1}{11} \times \frac{10}{12} =$$



Multiplying fractions practice

Grade 5 Fractions Worksheet

Calculate.

1.
$$\frac{1}{3} \times 2\frac{2}{3} =$$

2.
$$\frac{3}{4} \times 1\frac{1}{4} =$$

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

4.
$$1\frac{4}{5} \times 2\frac{2}{5} =$$

5.
$$1\frac{5}{9} \times 1\frac{3}{9} =$$

6.
$$1\frac{1}{2} \times 2\frac{1}{2} =$$

7.
$$1\frac{16}{25} \times 1\frac{3}{25} =$$

8.
$$1\frac{11}{15} \times \frac{1}{15} =$$

9.
$$1\frac{16}{20} \times 1\frac{14}{20} =$$

10.
$$\frac{3}{4} \times \frac{3}{4} =$$

11.
$$1\frac{4}{6} \times 1\frac{5}{6} =$$

12.
$$\frac{5}{10} \times \frac{5}{10} =$$

13.
$$2\frac{11}{12} \times \frac{9}{12} =$$

14.
$$1\frac{12}{16} \times 2\frac{7}{16} =$$

15.
$$2\frac{7}{16} \times 2\frac{5}{16} =$$

16.
$$\frac{1}{8} \times \frac{7}{8} =$$



Dividing fractions by fractions

Grade 5 Fractions Worksheet

Find the quotient.

1.
$$\frac{1}{7} \div \frac{1}{2} =$$

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

3.
$$\frac{7}{11} \div \frac{1}{4} =$$

4.
$$\frac{3}{4} \div \frac{4}{8} =$$

5.
$$\frac{1}{6} \div \frac{7}{12} =$$

6.
$$\frac{1}{3} \div \frac{3}{11} =$$

7.
$$\frac{10}{12} \div \frac{2}{5} =$$

8.
$$\frac{10}{11} \div \frac{3}{7} =$$

9.
$$\frac{2}{8} \div \frac{2}{8} =$$

10.
$$\frac{2}{9} \div \frac{4}{7} =$$



Dividing fractions and mixed numbers practice

Grade 5 Fractions Worksheet

Calculate.

1.
$$1\frac{1}{8} \div \frac{4}{8} =$$

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

3.
$$\frac{9}{12} \div \frac{6}{12} =$$

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

5.
$$1\frac{9}{10} \div 1\frac{3}{10} =$$

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

7.
$$1\frac{1}{3} \div 1\frac{1}{3} =$$

8.
$$1\frac{4}{6} \div 1\frac{5}{6} =$$

9.
$$1\frac{1}{5} \div 1\frac{2}{5} =$$

10.
$$1\frac{8}{12} \div 1\frac{9}{12} =$$
