

Name: _____

Date: _____

Multiplying Fractions – Level 2

1. Multiply the numerators (top numbers).
2. Multiply the denominators (bottom numbers).
3. Make sure your answer is in simplest form.

For example, $\frac{2}{4} \times \frac{1}{4} = \frac{2 \times 1}{4 \times 4} = \frac{2}{16}$. To simplify, we would divide the numerator and denominator by 2 and our final answer would be $\frac{1}{8}$. Therefore, $\frac{2}{4} \times \frac{1}{4} = \frac{1}{8}$.

Please multiply the following fractions making sure your final answer is in simplest form.

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

7. $\frac{1}{7} \times \frac{7}{14} = \text{---}$

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

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

8. $\frac{4}{8} \times \frac{1}{8} = \text{---}$

14. $\frac{3}{6} \times \frac{2}{9} = \text{---}$

3. $\frac{1}{4} \times \frac{1}{4} = \text{---}$

9. $\frac{3}{9} \times \frac{1}{9} = \text{---}$

15. $\frac{1}{8} \times \frac{1}{8} = \text{---}$

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

10. $\frac{7}{7} \times \frac{5}{14} = \text{---}$

16. $\frac{1}{4} \times \frac{4}{12} = \text{---}$

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

11. $\frac{1}{10} \times \frac{10}{20} = \text{---}$

17. $\frac{2}{5} \times \frac{1}{8} = \text{---}$

6. $\frac{1}{5} \times \frac{5}{10} = \text{---}$

12. $\frac{3}{20} \times \frac{7}{10} = \text{---}$

18. $\frac{7}{9} \times \frac{1}{7} = \text{---}$

FRACTIONS

$\frac{1}{5}$

Proper Fraction

The numerator is smaller than the denominator.

$\frac{6}{2}$

ImProper Fraction

The numerator is greater than the denominator.

$2\frac{1}{2}$

Mixed fraction

A whole number and a proper fraction together.

LESSON

Practice A

4-7

Mixed Numbers and Improper Fractions

Determine whether each fraction is proper or improper.

1. $\frac{1}{4}$

2. $\frac{3}{4}$

3. $\frac{7}{4}$

4. $\frac{9}{3}$

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

6. $\frac{6}{2}$

MIXED NUMBERS

Multiply $3\frac{2}{5} = \frac{17}{5}$
Add
Denominator $\times (3 \times 5) + 2$

IMPROPER FRACTIONS

a fraction greater than one

Go divide $\frac{17}{5} = 3\frac{2}{5}$
Leave whole number
Always use remainder as numerator
Denominator stays the same

$$\begin{array}{r} 3 \text{ r}2 \\ 5 \overline{)17} \\ -15 \\ \hline 2 \end{array}$$

Write each mixed number as an improper fraction.

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

8. $1\frac{1}{3}$

9. $2\frac{1}{2}$

10. $1\frac{1}{4}$

11. $1\frac{2}{3}$

12. $2\frac{1}{3}$

Write each improper fraction as a mixed number or whole number. Tell whether your answer is a mixed number or whole number.

13. $\frac{4}{1}$

14. $\frac{6}{3}$

15. $\frac{4}{3}$

16. $\frac{5}{2}$

17. $\frac{7}{5}$

18. $\frac{3}{2}$

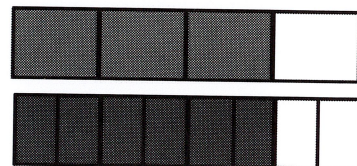
Equivalent Fractions

Equivalent means Equal

Two fractions are equivalent if they are the same size or at the same point on a number line.

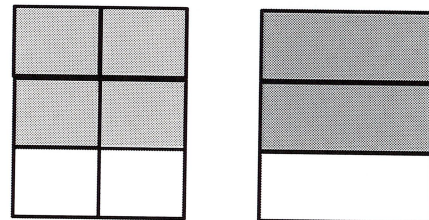
Multiplication Multiply the numerator and the denominator by the same number.

$$\frac{3}{4} \times \frac{2}{2} = \frac{6}{8}$$



Division Divide the numerator and the denominator by the same number.

$$\frac{4}{6} \div \frac{2}{2} = \frac{2}{3}$$



LESSON 4-5 Practice A
Equivalent Fractions

Find two equivalent fractions for the given fraction.

1. $\frac{1}{2}$

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

3. $\frac{1}{3}$

4. $\frac{1}{5}$

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

6. $\frac{3}{4}$

7. $\frac{1}{6}$

8. $\frac{2}{5}$

9. $\frac{10}{20}$

Find the missing numbers that makes the fractions equivalent.

10. $\frac{2}{4} = \frac{?}{8}$

11. $\frac{1}{3} = \frac{?}{9}$

12. $\frac{10}{5} = \frac{?}{1}$

13. $\frac{14}{4} = \frac{?}{2}$

14. $\frac{5}{6} = \frac{?}{12}$

15. $\frac{2}{7} = \frac{?}{21}$

SIMPLIFYING fractions

Step 1 Make a T-Chart For both the Numerator and Denominator

Step 2 Circle the Greatest Common Factor

Step 3 Divide both top and bottom by GCF

$$\frac{16}{24}$$

	16
1	16
2	8
4	4

	24
1	24
2	12
3	8
4	6

$$\frac{16 \div 8}{24 \div 8} = \frac{2}{3}$$

Write each fraction in simplest form.

16. $\frac{2}{4}$

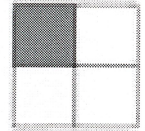
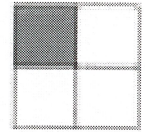
17. $\frac{3}{9}$

18. $\frac{8}{10}$

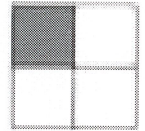
19. $\frac{4}{6}$

Multiply Whole x Fraction

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



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



LESSON

4-9

Practice A

Multiplying Fractions by Whole Numbers

Multiply. Write your answers in simplest form.

1. $1 \cdot \frac{1}{3}$

2. $3 \cdot \frac{1}{8}$

3. $7 \cdot \frac{1}{9}$

4. $3 \cdot \frac{1}{4}$

5. $4 \cdot \frac{2}{10}$

6. $3 \cdot \frac{1}{6}$

7. $2 \cdot \frac{2}{5}$

8. $10 \cdot \frac{1}{2}$

9. $5 \cdot \frac{1}{8}$

10. $4 \cdot \frac{1}{6}$

11. $5 \cdot \frac{1}{8}$

12. $3 \cdot \frac{2}{6}$

13. $7 \cdot \frac{1}{11}$

14. $3 \cdot \frac{1}{9}$

15. $5 \cdot \frac{1}{15}$
