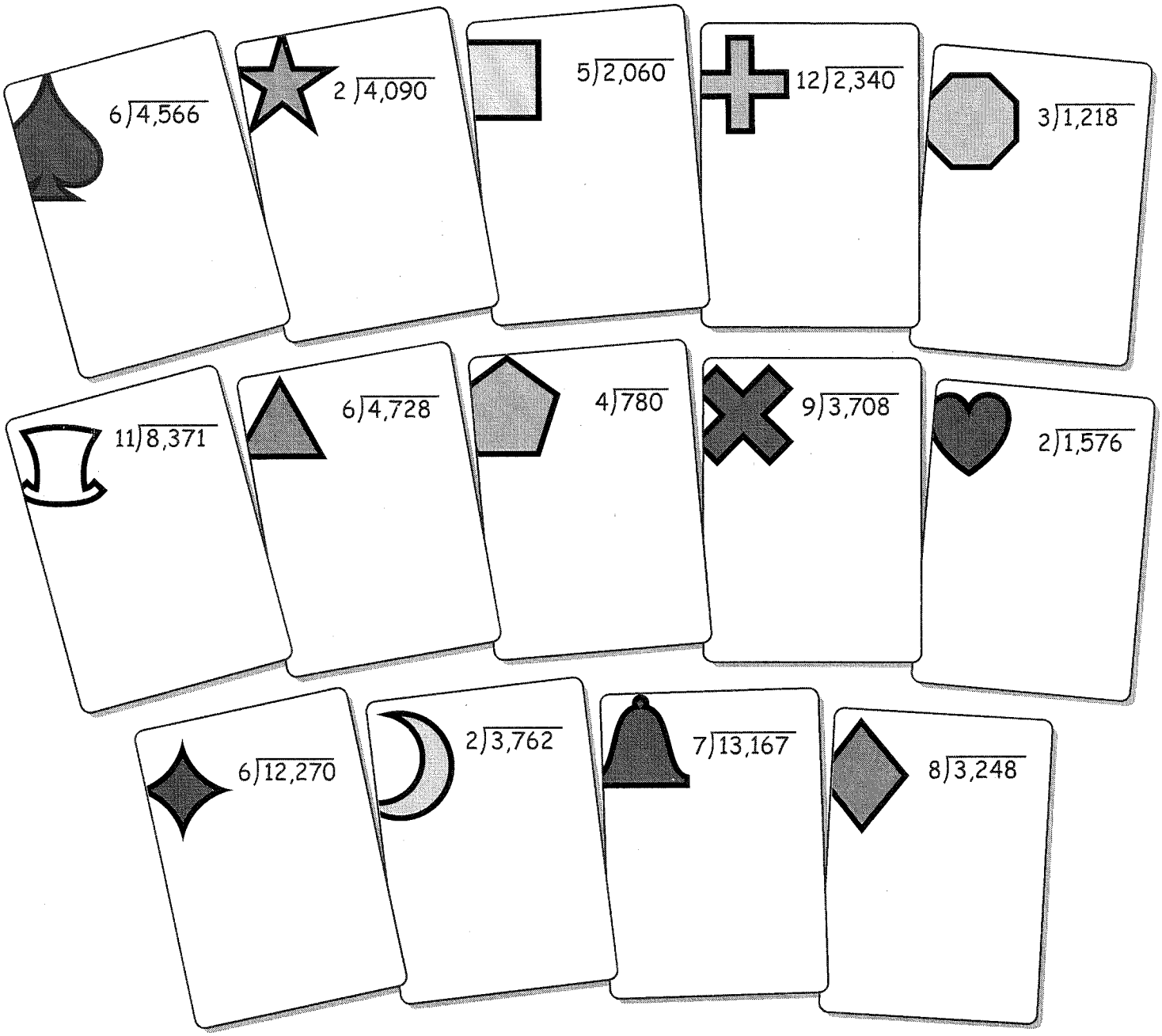
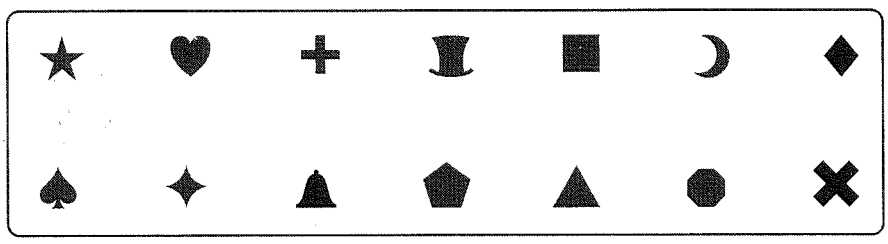
Division Duplication

5th Grade

There are 7 pairs of matching cards. Solve the equations then draw a line between symbols with the matching answers in the key below.



Key



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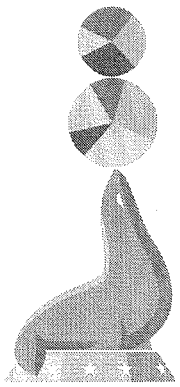
Skills Practice

ADDING MIXED FRACTIONS



Practice your fraction arithmetic skills by adding the following mixed fractions. Be sure to show your work and simplify your answers.

$3\frac{1}{6} + 2\frac{3}{5} = 5\frac{23}{30}$

$3\frac{1}{6} + 2\frac{3}{5}$ — Rewrite as improper fractions: $\frac{19}{6} + \frac{13}{5}$ — Find least common denominator: $\frac{19}{6}\ {\scriptstyle \times 5} + \frac{13}{5}\ {\scriptstyle \times 6}$

$\frac{95}{30} + \frac{78}{30} = \frac{173}{30} = 5\frac{23}{30}$

$6\frac{3}{7} + 1\frac{2}{5} =$ _____

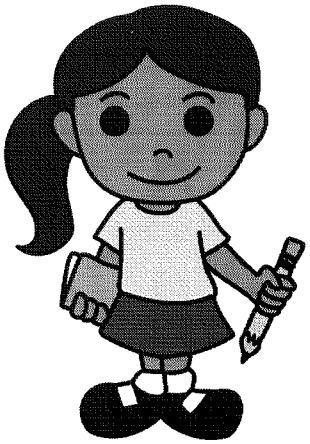
$1\frac{3}{4} + 6\frac{6}{7} =$ _____

$3\frac{4}{5} + 4\frac{1}{3} =$ _____

$2\frac{2}{7} + 3\frac{5}{6} =$ _____

$6\frac{1}{2} + 4\frac{2}{3} =$ _____

$2\frac{4}{7} + 3\frac{2}{3} =$ _____



Subtracting Fractions

There are three steps to subtract fractions.

$\frac{3}{4} - \frac{1}{4}$

Step 1: Make sure the denominators (the bottom numbers) are the same.

$\frac{3}{4} - \frac{1}{4} = \frac{3-1}{4} = \frac{2}{4}$

Step 2: Subtract the numerators (the top numbers). Write the answer over the same denominator:

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

Step 3: Simplify the fraction.

Add and subtract the fractions below. If you can, simplify the answer.

$\frac{5}{6} - \frac{2}{15} =$	$\frac{7}{8} - \frac{5}{16} =$
$\frac{5}{7} - \frac{2}{3} =$	$\frac{11}{15} - \frac{3}{5} =$
$\frac{3}{4} - \frac{1}{5} =$	$\frac{2}{5} - \frac{4}{10} =$

Multiplying Decimals

Complete the multiplication problems. Don't forget to move the decimal point!

.24 x .32	.78 x .28	.53 x .12	.98 x .77
.82 x .33	.19 x .51	.70 x .60	.65 x .44
.94 x .10	.26 x .78	.87 x .63	.07 x .09
1.) .72 x .99 =		2.) .66 x .20 =	
3.) .41 x .71 =		4.) .62 x .55 =	

Mixed Fractions

A mixed fraction, or mixed number, is a whole number and a proper fraction combined.
These fractions can also be written as improper fractions.
To convert a mixed fraction to a improper fraction, follow the steps below.

1. Multiply the whole number part by the fraction's denominator.
2. Add that to the numerator.
3. Then write the result on top of the denominator.

Example: Convert $3\frac{2}{5}$ to an improper fraction.

Multiply the whole number by the denominator: **3 x 5 = 15**

Add the numerator to that: **15 + 2 = 17**

Then write that down above the denominator, like this: $\frac{17}{5}$

Convert the following mixed numbers to improper fractions.
Write your answer on the line next to each problem.

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

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

3) $3\frac{1}{4} =$ _____

4) $3\frac{2}{9} =$ _____

5) $9\frac{3}{8} =$ _____

6) $2\frac{1}{2} =$ _____

7) $3\frac{1}{4} =$ _____

8) $6\frac{1}{10} =$ _____

9) $5\frac{7}{10} =$ _____

10) $9\frac{1}{2} =$ _____

11) $9\frac{1}{5} =$ _____

12) $6\frac{1}{2} =$ _____

13) $5\frac{4}{9} =$ _____

14) $9\frac{2}{3} =$ _____

15) $2\frac{3}{8} =$ _____

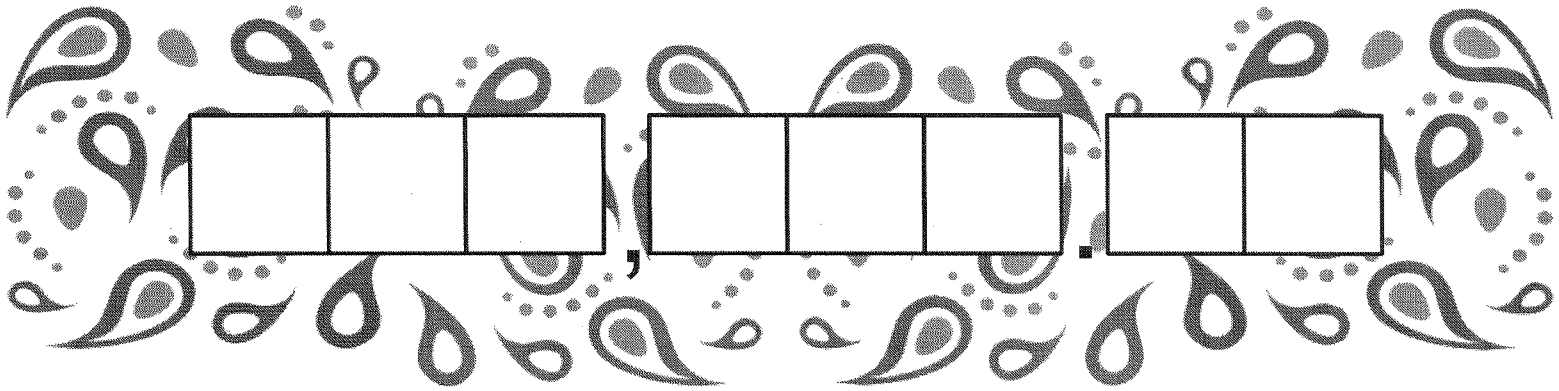
Greater Than >, Less Than < or Equal =

Directions: 1. Multiply or divide to find a common denominator.
2. Then compare the numerator.
3. Write >, <, or = in the circle.

$\frac{3}{4} \bigcirc \frac{1}{4}$	$\frac{5}{7} \bigcirc \frac{6}{7}$	$\frac{2}{10} \bigcirc \frac{8}{10}$
$\frac{2}{6} \bigcirc \frac{2}{3}$	$\frac{1}{2} \bigcirc \frac{5}{8}$	$\frac{5}{18} \bigcirc \frac{1}{3}$
$\frac{4}{5} \bigcirc \frac{22}{25}$	$\frac{5}{6} \bigcirc \frac{33}{42}$	$\frac{80}{100} \bigcirc \frac{4}{5}$
$\frac{15}{21} \bigcirc \frac{4}{7}$	$\frac{4}{16} \bigcirc \frac{12}{24}$	$\frac{36}{81} \bigcirc \frac{18}{27}$
$\frac{21}{35} \bigcirc \frac{16}{40}$	$\frac{28}{49} \bigcirc \frac{18}{21}$	$\frac{60}{144} \bigcirc \frac{12}{24}$
$\frac{2}{5} \bigcirc \frac{4}{7}$	$\frac{5}{9} \bigcirc \frac{3}{4}$	$\frac{4}{6} \bigcirc \frac{7}{8}$
$\frac{9}{13} \bigcirc \frac{5}{8}$	$\frac{8}{10} \bigcirc \frac{6}{9}$	$\frac{7}{11} \bigcirc \frac{2}{4}$
$\frac{25}{10} \bigcirc \frac{20}{10}$	$\frac{46}{6} \bigcirc \frac{14}{4}$	$\frac{57}{7} \bigcirc \frac{62}{9}$

Place Value Puzzle

Read each clue to help you figure out the eight-digit number.



1. Multiply 3 by the number of days in a week. Subtract 12 and write your answer in the thousands place.
2. Add 3 to the difference between 5 and 2. Write your answer in the ones place.
3. Divide the number in the thousands place by itself and then multiply the answer by 0. Write your answer in the tenths place.
4. Subtract the number of days in a weekend from the number of days in February (non-leap year). Divide your answer by 2. Subtract the number in the thousands place from that answer. Write your new answer in the hundredths place.
5. Add the numbers from the tenths, hundredths and ones place, and then divide by 2. Write your answer in the tens place.
6. Divide 16 into the number of hours in two days and write your answer in the hundred thousands place.
7. Multiply the number in the hundred thousands place by the number in the thousands place. Subtract 20 from that answer. Write your new answer in the ten thousands place.
8. Subtract the number in the tens place from the number in the ones place. Write your answer in the hundreds place.

Order of Operations: PEMDAS

1. **Parentheses** ( ) First, perform operations within parentheses.
2. **Exponents** Y^2 Second, perform operations with exponents.
3. **Multiplication** X **and Division** $\div$ Third, perform all multiplication and division operations from left to right.
4. **Addition** + **and Subtraction** - Lastly, perform all addition and subtraction operations from left to right.

Solve the following problems using PEMDAS

1. $(4 + 3) \times 10 \div 2 + (5 \times 6)$

2. $3^2 + (2 + 12 \times 2) - 16 \div 4$

3. $4(15 \div 3) + (6 \times 3) - 2^2$

4. $9^2 \times 2 - 20$

5. $1 - 13 \times 2 + 25 - 3 + 15 - 3$

6. $(10 - 7) + (2 \times 14 \div 4)$

7. $64 - 8 + 12 \times 2 + 9$

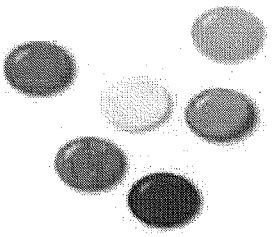
8. $12^2 - 23 + (9 \times 3)$

9. $4^3 - 3^3$

10. $9 + 5 - 10 \times 6 - 8$

Delicious Decimals

division



Solve the problems by adding each set of decimals. Don't forget to make the divisor a whole number.

1. $3.5\overline{)77.35}$

$$\begin{array}{r} 22.1 \\ 3.5\overline{)77.35} \\ -\,770 \\ \hline 35 \\ 35 \\ \hline 0 \end{array}$$

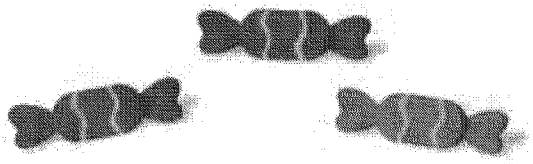
2. $30\overline{)60.66}$

3. $4.2\overline{)20.076}$

4. $5.06\overline{)47.058}$

5. $7\overline{)24.36}$

6. $.08\overline{)3.7872}$



7. $8.4\overline{)82.152}$

8. $3.5\overline{)9.205}$

9. $6.02\overline{)56.588}$

10. $10\overline{)84.6}$

11. $7.2\overline{)22.104}$

12. $5.67\overline{)41.391}$

Fraction Review

For each problem below, add or subtract. Show your work on another piece of paper and write your answers on the lines provided.

1) $\frac{1}{2} - \frac{1}{4} =$ _____

2) $\frac{4}{8} + \frac{1}{4} =$ _____

3) $\frac{1}{3} + \frac{3}{9} =$ _____

4) $\frac{3}{5} - \frac{1}{3} =$ _____

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

6) $\frac{7}{10} - \frac{1}{2} =$ _____

7) $\frac{3}{6} + \frac{2}{12} =$ _____

8) $\frac{4}{14} + \frac{1}{7} =$ _____

9) $\frac{1}{3} + \frac{3}{9} =$ _____

10) $\frac{4}{12} - \frac{1}{3} =$ _____

11) $1\frac{10}{21} + 4\frac{5}{7} =$ _____

12) $2\frac{7}{27} + 8\frac{5}{9} =$ _____

13) $7\frac{4}{5} - 3\frac{8}{20} =$ _____

14) $9\frac{8}{20} - 4\frac{2}{5} =$ _____

15) $3\frac{1}{7} + 5\frac{12}{21} =$ _____

For each problem below, add or subtract fractions and then compare results. Write greater than (>), less than (<), or equal to (=).

1) $6\frac{1}{4} - 3\frac{1}{20} \square 6\frac{1}{4} - 3\frac{1}{20}$

2) $6\frac{5}{10} + 8\frac{1}{4} \square 2\frac{4}{14} + 7\frac{1}{7}$

3) $8\frac{3}{4} - 3\frac{5}{7} \square 9\frac{6}{7} - 3\frac{2}{14}$

4) $3\frac{1}{4} + 3\frac{4}{6} \square 2\frac{1}{2} + 3\frac{1}{2}$

5) $9\frac{5}{6} + 5\frac{2}{3} \square 8\frac{7}{9} - 4\frac{1}{3}$

6) $5\frac{1}{4} - 1\frac{1}{8} \square 3\frac{1}{2} + 5\frac{3}{6}$

For each problem below, find the missing factor by computing the inverse operation.

1) $4\frac{1}{2} - \square = 2\frac{7}{8}$

2) $\square + 1\frac{1}{2} = 11$

3) $\square + 8\frac{7}{8} = 13\frac{3}{8}$

4) $7\frac{5}{8} - \square = 5\frac{3}{8}$