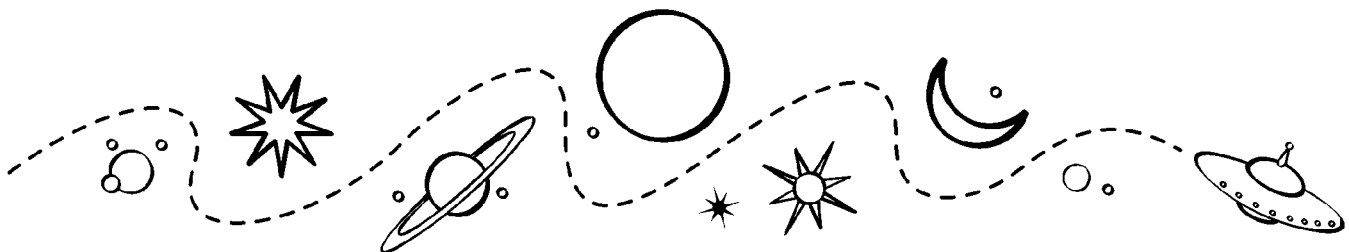


Name _____

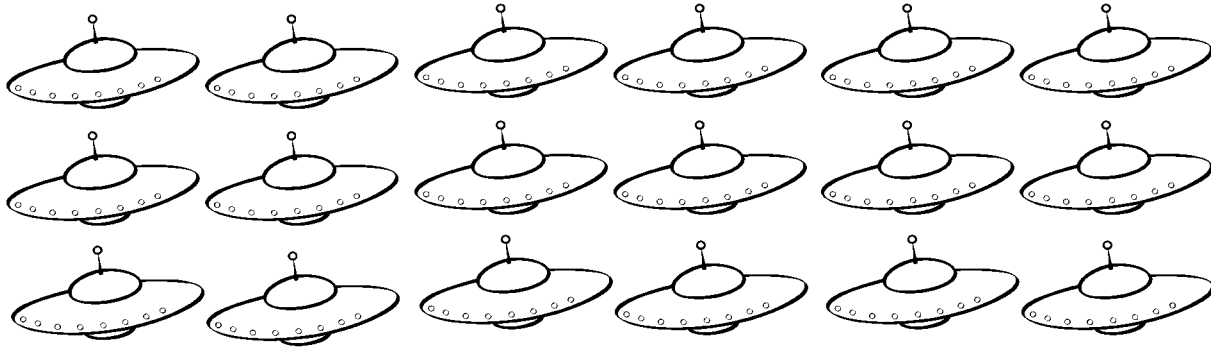
Fill in the multiplication table.

	1	2	3	4	5	6	7	8	9
1	1	2							
2	2	4							
3									
4									
5									
6									
7									
8									
9									



Name _____

Multiplication and division have an inverse relationship.
Fill in the missing numbers. Use multiplication to check
your answers.



Answer

Check

1. _____ $\div 3 = 6$ 18 $6 \times 3 = 18$

2. _____ $\div 4 = 3$ _____ _____

3. _____ $\div 2 = 8$ _____ _____

4. _____ $\div 3 = 7$ _____ _____

5. _____ $\div 5 = 5$ _____ _____

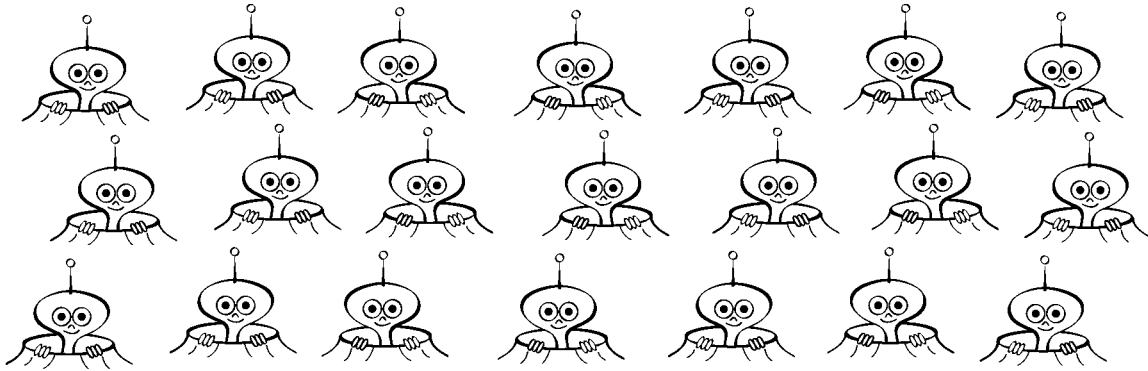
6. _____ $\div 4 = 9$ _____ _____

7. _____ $\div 5 = 3$ _____ _____

8. _____ $\div 6 = 4$ _____ _____

Name _____

Solve the equations. Use the pictures to help you see the division.



Example: 21 aliens divided into 3 groups = 7 aliens in each group. $21 \div 3 = \underline{7}$

1. 18 UFOs divided into 3 groups = _____ UFOs in each group.

$$18 \div 3 = \underline{\quad}$$

2. _____ rockets divided into 9 groups = 3 rockets in each group.

$$\underline{\quad} \div 9 = 3$$

3. 16 planets divided into _____ groups = 4 planets in each group.

$$16 \div \underline{\quad} = 4$$

4. 8 comets divided into _____ groups = 2 comets in each group.

$$8 \div \underline{\quad} = 2$$

5. 24 suns divided into 4 groups = _____ suns in each group.

$$24 \div 4 = \underline{\quad}$$

Name _____

Solve the addition problems below.

$$\begin{array}{r} 1. \quad 6543 \\ + 1234 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 2313 \\ + 3687 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 1111 \\ + 5555 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 8750 \\ + 6725 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 9119 \\ + 3881 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 7117 \\ + 4263 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 5101 \\ + 1601 \\ \hline \end{array}$$

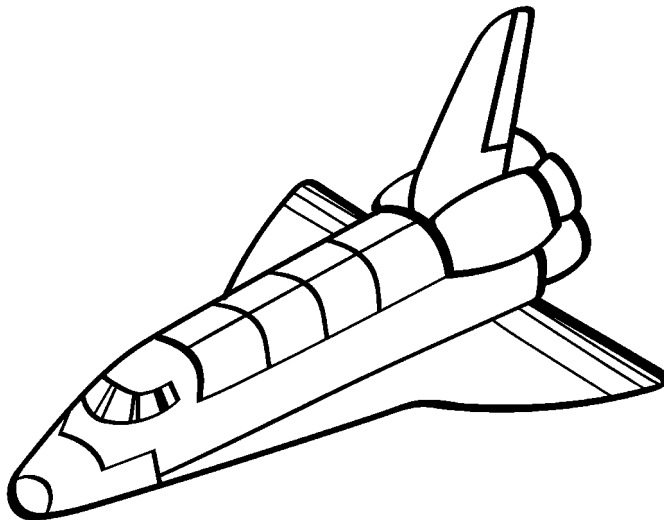
$$\begin{array}{r} 7. \quad 6249 \\ + 4444 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 1890 \\ + 7726 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 2987 \\ + 3877 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 2221 \\ + 4443 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 5467 \\ + 3260 \\ \hline \end{array}$$



Name _____

Solve the subtraction problems below.

$$\begin{array}{r} 1. \quad 3455 \\ - 2435 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 2763 \\ - 1515 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 3896 \\ - 1896 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 8733 \\ - 4456 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 4433 \\ - 3322 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 8765 \\ - 6543 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 6575 \\ - 4725 \\ \hline \end{array}$$

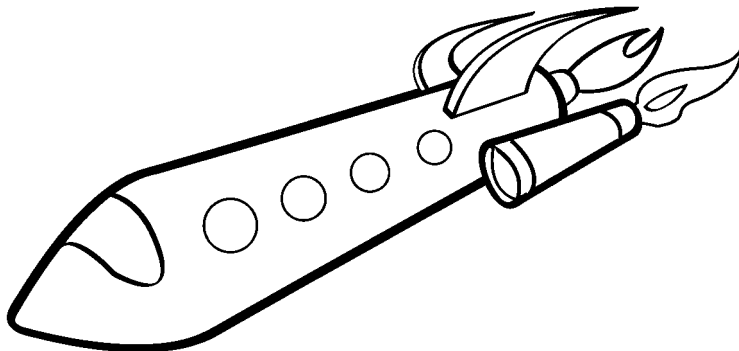
$$\begin{array}{r} 7. \quad 6001 \\ - 4001 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 2121 \\ - 1414 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 7777 \\ - 6543 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 9709 \\ - 7804 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 1397 \\ - 1000 \\ \hline \end{array}$$



Name _____

Round the numbers to the nearest ten.

- | | |
|--------------|---------------|
| 1. 57 _____ | 6. 33 _____ |
| 2. 46 _____ | 7. 9 _____ |
| 3. 72 _____ | 8. 198 _____ |
| 4. 121 _____ | 9. 242 _____ |
| 5. 417 _____ | 10. 501 _____ |

Round the numbers to the nearest hundred.

- | | |
|----------------|-----------------|
| 1. 248 _____ | 6. 409 _____ |
| 2. 397 _____ | 7. 375 _____ |
| 3. 777 _____ | 8. 6,437 _____ |
| 4. 1,449 _____ | 9. 7,895 _____ |
| 5. 2,735 _____ | 10. 1,980 _____ |

Round the numbers to the nearest thousand.

- | | |
|----------------|-----------------|
| 1. 6,782 _____ | 6. 3,578 _____ |
| 2. 5,150 _____ | 7. 2,501 _____ |
| 3. 8,888 _____ | 8. 12,788 _____ |
| 4. 1,148 _____ | 9. 36,499 _____ |
| 5. 3,477 _____ | 10. 7,507 _____ |

Name _____

Insert the mathematical signs that lead you to the
answer. + - × ÷

Example: $5 - 2 - 8 - 3 = 6$

$5 \times 2 - 8 \times 3 = 6$

1. $5 \underline{\hspace{1cm}} 6 \underline{\hspace{1cm}} 10 = 3$

5. $4 \underline{\hspace{1cm}} 2 \underline{\hspace{1cm}} 3 = 5$

2. $9 \underline{\hspace{1cm}} 3 \underline{\hspace{1cm}} 8 = 24$

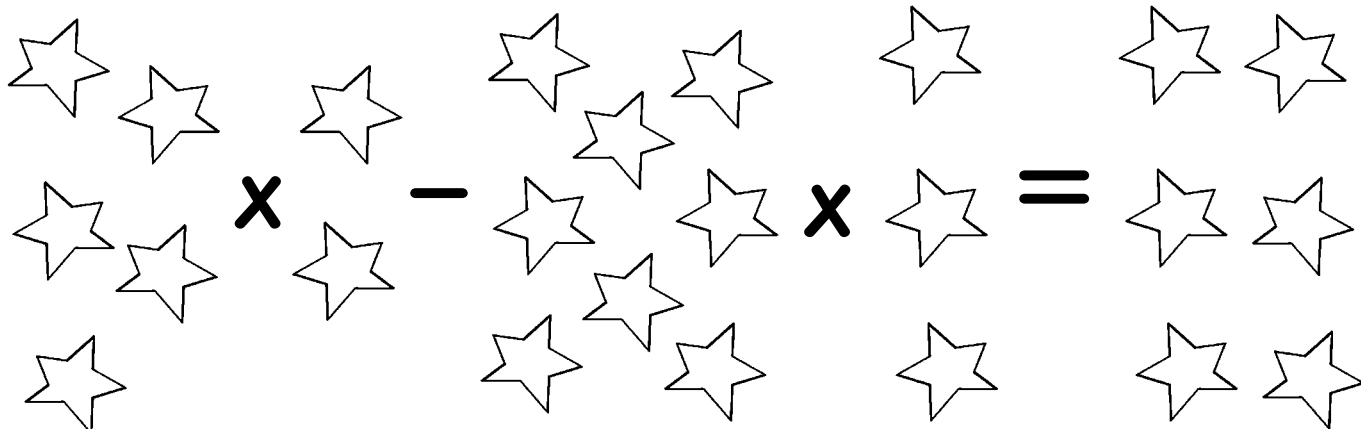
6. $7 \underline{\hspace{1cm}} 2 \underline{\hspace{1cm}} 6 \underline{\hspace{1cm}} 5 = 3$

3. $8 \underline{\hspace{1cm}} 7 \underline{\hspace{1cm}} 4 \underline{\hspace{1cm}} 6 = 5$

7. $5 \underline{\hspace{1cm}} 3 \underline{\hspace{1cm}} 6 \underline{\hspace{1cm}} 8 = 6$

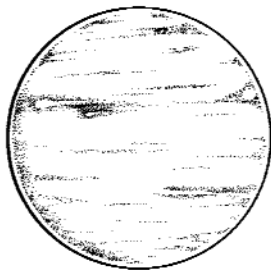
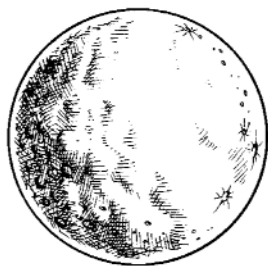
4. $3 \underline{\hspace{1cm}} 4 \underline{\hspace{1cm}} 7 \underline{\hspace{1cm}} 3 = 15$

8. $4 \underline{\hspace{1cm}} 2 \underline{\hspace{1cm}} 5 \underline{\hspace{1cm}} 8 = 5$



Name _____

Color $\frac{2}{3}$ of the planets red and $\frac{1}{3}$ of the planets blue.



Reduce these fractions to their lowest terms.

1. $\frac{3}{9} =$ _____

6. $\frac{9}{36} =$ _____

2. $\frac{3}{6} =$ _____

7. $\frac{4}{32} =$ _____

3. $\frac{40}{100} =$ _____

8. $\frac{5}{45} =$ _____

4. $\frac{8}{24} =$ _____

9. $\frac{8}{16} =$ _____

5. $\frac{5}{20} =$ _____

10. $\frac{5}{10} =$ _____

Add these fractions. Reduce your answer to lowest terms.

1. $\frac{1}{8} + \frac{2}{8} =$ _____

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

2. $\frac{2}{4} + \frac{2}{4} =$ _____

5. $\frac{3}{12} + \frac{6}{12} =$ _____

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

6. $\frac{3}{12} + \frac{3}{6} =$ _____

Name _____

Each fact family uses the same numbers in all the equations.

For example: Equations for the family of numbers 3, 5, & 8:

$$\begin{array}{r} 3 \\ +5 \\ \hline 8 \end{array} \quad \begin{array}{r} 5 \\ +3 \\ \hline 8 \end{array} \quad \begin{array}{r} 8 \\ -3 \\ \hline 5 \end{array} \quad \begin{array}{r} 8 \\ -5 \\ \hline 3 \end{array}$$

For each equation, write the other 3 equations for the fact family.

1. 6

$$\begin{array}{r} +5 \\ \hline 11 \end{array} \quad + \quad \underline{\quad} \quad - \quad \underline{\quad} \quad - \quad \underline{\quad}$$

5. 5

$$\begin{array}{r} +2 \\ \hline 7 \end{array} \quad + \quad \underline{\quad} \quad - \quad \underline{\quad} \quad - \quad \underline{\quad}$$

2. 5

$$\begin{array}{r} +4 \\ \hline 9 \end{array} \quad + \quad \underline{\quad} \quad - \quad \underline{\quad} \quad - \quad \underline{\quad}$$

6. 14

$$\begin{array}{r} +8 \\ \hline 22 \end{array} \quad + \quad \underline{\quad} \quad - \quad \underline{\quad} \quad - \quad \underline{\quad}$$

3. 12

$$\begin{array}{r} +7 \\ \hline 16 \end{array} \quad + \quad \underline{\quad} \quad - \quad \underline{\quad} \quad - \quad \underline{\quad}$$

7. 4

$$\begin{array}{r} +9 \\ \hline 13 \end{array} \quad + \quad \underline{\quad} \quad - \quad \underline{\quad} \quad - \quad \underline{\quad}$$

4. 3

$$\begin{array}{r} +7 \\ \hline 10 \end{array} \quad + \quad \underline{\quad} \quad - \quad \underline{\quad} \quad - \quad \underline{\quad}$$

8. 10

$$\begin{array}{r} +5 \\ \hline 15 \end{array} \quad + \quad \underline{\quad} \quad - \quad \underline{\quad} \quad - \quad \underline{\quad}$$

Write the equations for the following fact families.

1. 4, 6, 10 + _____ + _____ - _____ - _____

2. 7, 12, 19 + _____ + _____ - _____ - _____

3. 3, 5, 8 + _____ + _____ - _____ - _____

Name _____

Each fact family uses the same numbers in all the equations.

For example: Equations for the family of numbers 5, 7, & 12:

$$\begin{array}{r} 5 \\ +7 \\ \hline 12 \end{array} \quad \begin{array}{r} 7 \\ +5 \\ \hline 12 \end{array} \quad \begin{array}{r} 12 \\ -5 \\ \hline 7 \end{array} \quad \begin{array}{r} 12 \\ -7 \\ \hline 5 \end{array}$$

For each equation, write the other 3 equations for the fact family.

1. 4

$$\begin{array}{r} +6 \\ \hline 10 \end{array} \quad + \quad - \quad -$$

5. 8

$$\begin{array}{r} +7 \\ \hline 15 \end{array} \quad + \quad - \quad -$$

2. 11

$$\begin{array}{r} +3 \\ \hline 14 \end{array} \quad + \quad - \quad -$$

6. 5

$$\begin{array}{r} +4 \\ \hline 9 \end{array} \quad + \quad - \quad -$$

3. 12

$$\begin{array}{r} +6 \\ \hline 18 \end{array} \quad + \quad - \quad -$$

7. 11

$$\begin{array}{r} +3 \\ \hline 14 \end{array} \quad + \quad - \quad -$$

4. 2

$$\begin{array}{r} +7 \\ \hline 9 \end{array} \quad + \quad - \quad -$$

8. 5

$$\begin{array}{r} +2 \\ \hline 7 \end{array} \quad + \quad - \quad -$$

Write the equations for the following fact families.

1. 3, 10, 13 + + - -

2. 4, 7, 11 + + - -

3. 5, 1, 6 + + - -

Name _____

Each fact family uses the same numbers in all the equations.

For example: Equations for the family of numbers 3, 7, & 21:

$$\begin{array}{r} 7 \\ \times 3 \\ \hline 21 \end{array} \quad \begin{array}{r} 3 \\ \times 7 \\ \hline 21 \end{array} \quad \begin{array}{r} 21 \\ \div 3 \\ \hline 7 \end{array} \quad \begin{array}{r} 21 \\ \div 7 \\ \hline 3 \end{array}$$

For each equation, write the other 3 equations for the fact family.

1. 5

$$\begin{array}{r} \times 7 \\ \hline 35 \end{array} \quad \times \quad \div \quad \div$$

5. 5

$$\begin{array}{r} \times 4 \\ \hline 20 \end{array} \quad \times \quad \div \quad \div$$

2. 2

$$\begin{array}{r} \times 5 \\ \hline 10 \end{array} \quad \times \quad \div \quad \div$$

6. 5

$$\begin{array}{r} \times 3 \\ \hline 15 \end{array} \quad \times \quad \div \quad \div$$

3. 4

$$\begin{array}{r} \times 9 \\ \hline 36 \end{array} \quad \times \quad \div \quad \div$$

7. 6

$$\begin{array}{r} \times 5 \\ \hline 30 \end{array} \quad \times \quad \div \quad \div$$

4. 8

$$\begin{array}{r} \times 2 \\ \hline 16 \end{array} \quad \times \quad \div \quad \div$$

9. 3

$$\begin{array}{r} \times 8 \\ \hline 24 \end{array} \quad \times \quad \div \quad \div$$

Write the equations for the following fact families.

1. 3, 4, 12

$$\times \quad \times \quad \div \quad \div$$

2. 5, 8, 40

$$\times \quad \times \quad \div \quad \div$$

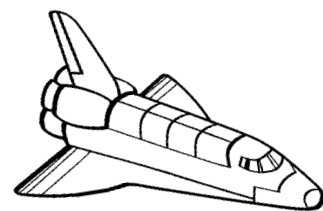
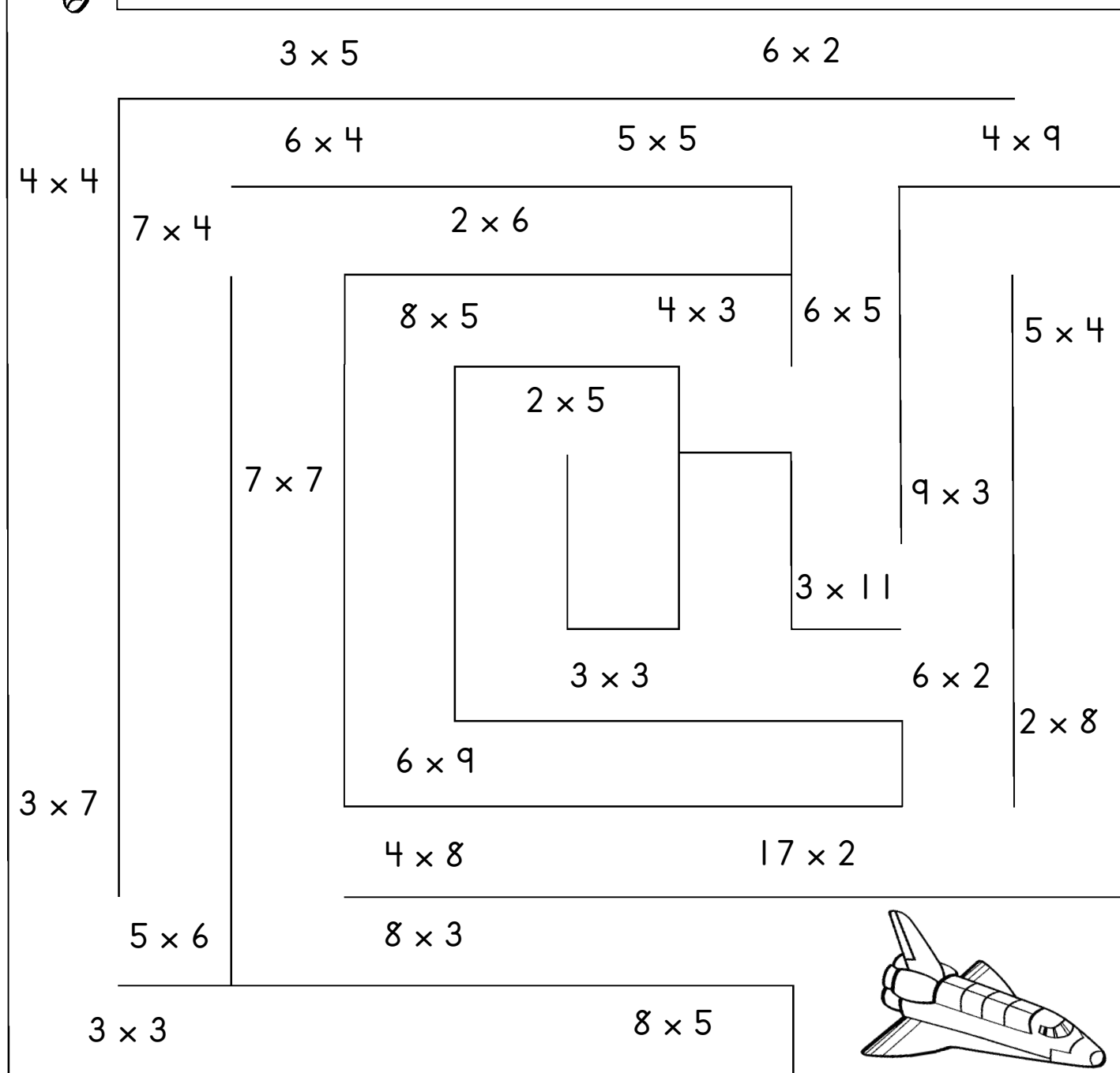
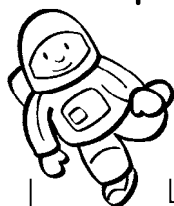
3. 2, 9, 18

$$\times \quad \times \quad \div \quad \div$$

Name _____

Multiplication Maze

Help the astronaut return to her space shuttle. Choose the path with equations that total < 35 but > 15 .



Name _____

Write the following numbers in expanded notation.

Example: $531 = 500 + 30 + 1$

1. $427 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

2. $279 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

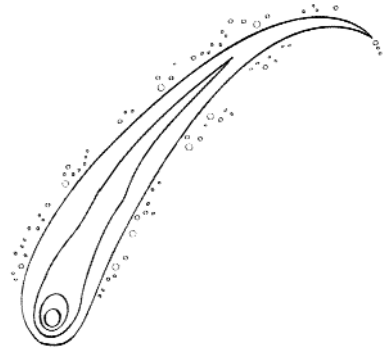
3. $382 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

4. $5238 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

5. $6102 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

6. $4239 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

7. $1732 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$



Write the smallest possible number using the following numbers.

Show your number in expanded notation.

Example: $6, 8, 1, 9 \quad 1,689 = 1000 + 600 + 80 + 9$

1. $4, 3, 7 \quad \underline{\hspace{2cm}} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

2. $9, 8, 1 \quad \underline{\hspace{2cm}} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

3. $5, 4, 4, 7 \quad \underline{\hspace{2cm}} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

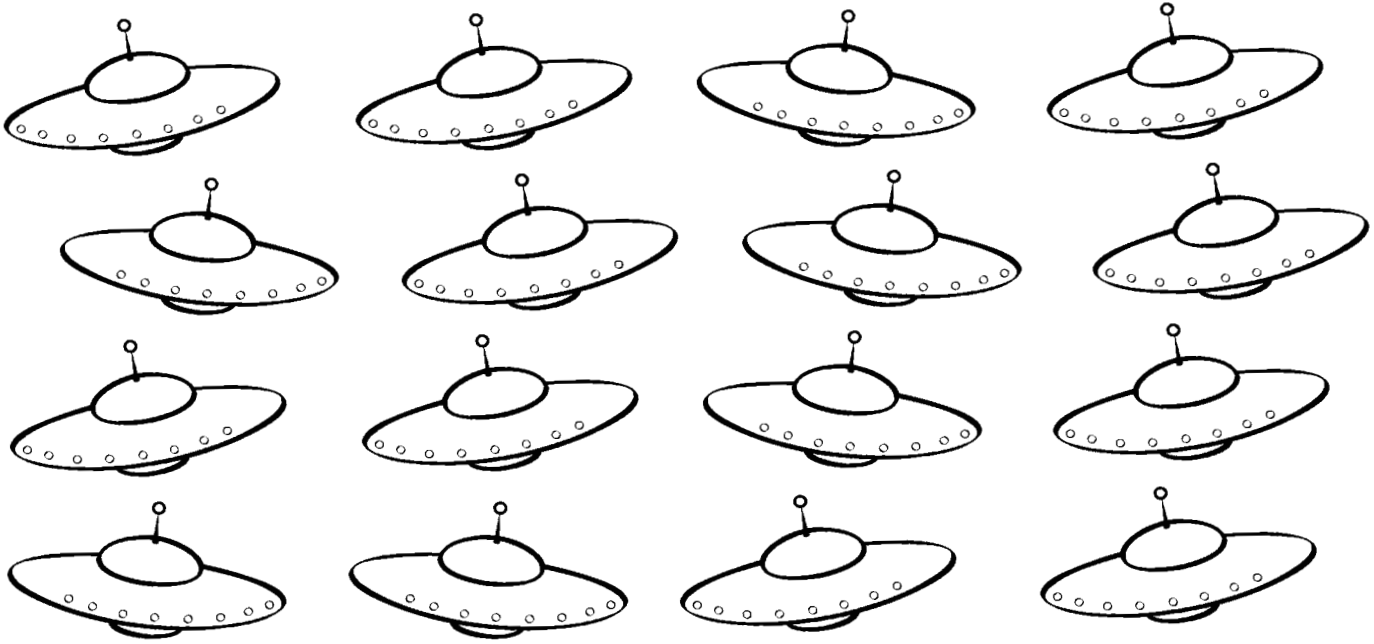
4. $2, 8, 3, 6 \quad \underline{\hspace{2cm}} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

5. $1, 2, 9, 5 \quad \underline{\hspace{2cm}} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

6. $8, 9, 6, 7 \quad \underline{\hspace{2cm}} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

Name _____

There are 16 UFOs waiting to land on the planet.
Divide these UFOs to represent the following fractions.
Write how many UFOs equal each fraction.



$$\frac{4}{4} \text{ of the UFOs} = \underline{\hspace{2cm}}$$

$$\frac{5}{8} \text{ of the UFOs} = \underline{\hspace{2cm}}$$

$$\frac{1}{16} \text{ of the UFOs} = \underline{\hspace{2cm}}$$

$$\frac{7}{8} \text{ of the UFOs} = \underline{\hspace{2cm}}$$

$$\frac{1}{4} \text{ of the UFOs} = \underline{\hspace{2cm}}$$

$$\frac{6}{16} \text{ of the UFOs} = \underline{\hspace{2cm}}$$

$$\frac{1}{2} \text{ of the UFOs} = \underline{\hspace{2cm}}$$

$$\frac{2}{8} \text{ of the UFOs} = \underline{\hspace{2cm}}$$

$$\frac{3}{8} \text{ of the UFOs} = \underline{\hspace{2cm}}$$

$$\frac{3}{4} \text{ of the UFOs} = \underline{\hspace{2cm}}$$

$$\frac{2}{4} \text{ of the UFOs} = \underline{\hspace{2cm}}$$

$$\frac{8}{16} \text{ of the UFOs} = \underline{\hspace{2cm}}$$

Name _____

In each group of fractions, circle those with common denominators.

1. $\frac{1}{2}$, $\frac{2}{4}$, $\frac{5}{6}$, $\frac{3}{4}$

6. $\frac{5}{8}$, $\frac{3}{6}$, $\frac{4}{5}$, $\frac{6}{8}$

2. $\frac{1}{4}$, $\frac{5}{6}$, $\frac{3}{4}$, $\frac{1}{3}$

7. $\frac{1}{2}$, $\frac{3}{6}$, $\frac{2}{6}$, $\frac{5}{6}$

3. $\frac{1}{3}$, $\frac{5}{6}$, $\frac{5}{8}$, $\frac{3}{6}$

8. $\frac{8}{9}$, $\frac{3}{6}$, $\frac{5}{9}$, $\frac{4}{5}$

4. $\frac{1}{2}$, $\frac{5}{10}$, $\frac{5}{6}$, $\frac{9}{10}$

9. $\frac{5}{7}$, $\frac{3}{5}$, $\frac{3}{7}$, $\frac{1}{3}$

5. $\frac{6}{7}$, $\frac{5}{7}$, $\frac{3}{5}$, $\frac{3}{7}$

10. $\frac{3}{4}$, $\frac{2}{6}$, $\frac{2}{4}$, $\frac{9}{10}$

Find the common denominator in these fractions.

Write the new fractions.

Examples:

1. $\frac{2}{8}$, $\frac{3}{12}$ $\frac{1}{4}$, $\frac{1}{4}$ _____

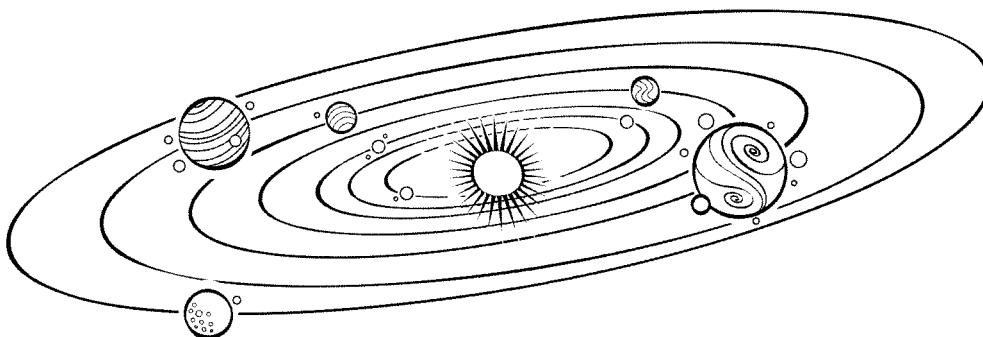
4. $\frac{1}{4}$, $\frac{2}{3}$ $\frac{3}{12}$, $\frac{8}{12}$ _____

2. $\frac{8}{16}$, $\frac{18}{24}$ _____

5. $\frac{2}{5}$, $\frac{1}{2}$ _____

3. $\frac{2}{6}$, $\frac{6}{12}$ _____

6. $\frac{4}{9}$, $\frac{1}{4}$ _____



Name _____

Reduce these fractions to their lowest terms.

1. $\frac{4}{36} = \frac{1}{9}$

6. $\frac{3}{6} =$ _____

2. $\frac{8}{16} =$ _____

7. $\frac{12}{36} =$ _____

3. $\frac{7}{28} =$ _____

8. $\frac{4}{28} =$ _____

4. $\frac{6}{20} =$ _____

9. $\frac{8}{24} =$ _____

5. $\frac{20}{100} =$ _____

10. $\frac{10}{50} =$ _____

Add these fractions. Reduce your answer to lowest terms.

1. $\frac{1}{4} + \frac{1}{4} =$ _____

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

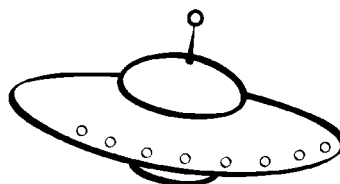
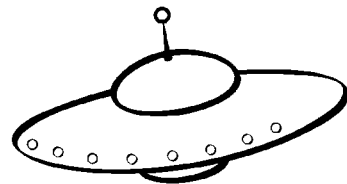
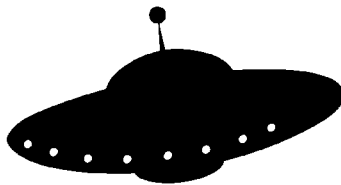
2. $\frac{1}{6} + \frac{2}{6} =$ _____

5. $\frac{3}{12} + \frac{6}{12} =$ _____

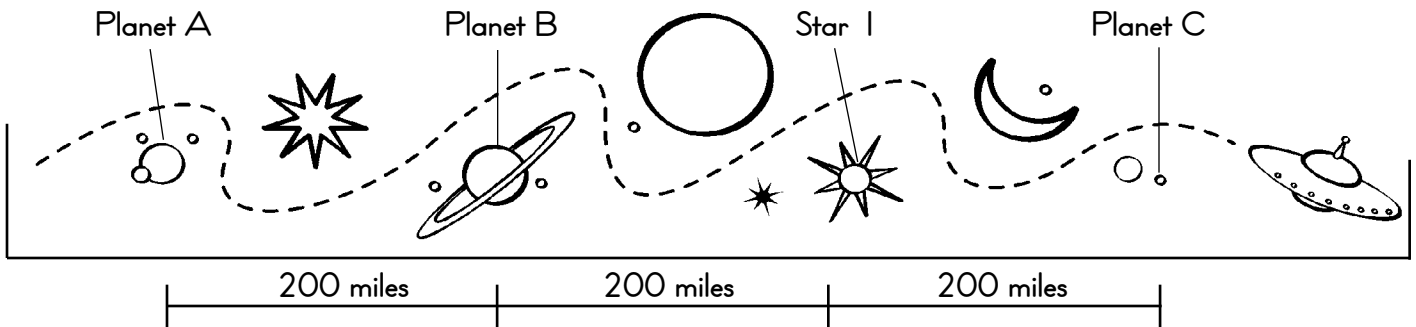
3. $\frac{2}{9} + \frac{4}{9} =$ _____

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

$\frac{2}{3}$ of these spaceships are white and $\frac{1}{3}$ is black.



Name _____



1. The slow UFO can fly from the Planet A to Planet B in 4 hours. How many miles per hour did he travel?

2. The fast UFO can fly the same route in 2 hours. How many miles per hour did she travel? _____

3. The silly UFO left the Planet A at 5:00 P.M. She was playing around and didn't reach Star I until 1:00 A.M. How fast did she travel? _____

4. The speedy UFO travelled all the way to Planet C while the silly UFO was playing around. He even stopped for dinner and a nap by Star I for five hours. How fast did he travel?

5. If the fast UFO reached the far side of Planet C at 11:00 A.M., what time did she leave Planet A?

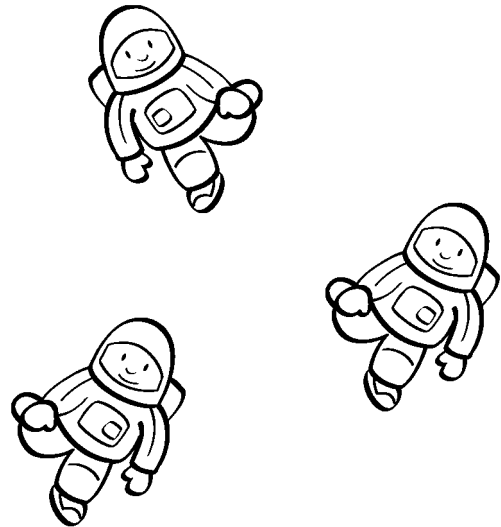
Name _____

The area of a rectangle is its width times its height.

← 4 units →

unit	unit	unit	unit
unit	unit	unit	unit
unit	unit	unit	unit

↑ 3 units ↓



$$4 \text{ units} \times 3 \text{ units} = 12 \text{ units}$$

The astronauts are making a building to store all the spaceships they have found. Look at their plans and write down how many units each spaceship will need.

--	--	--	--

Rocketship _____ \times _____ = _____ units

Small UFO _____ \times _____ = _____ units

Large UFO _____ \times _____ = _____ units

Space shuttle _____ \times _____ = _____ units

Name _____

Read the number words. Write the numbers in the blank.

one hundred fifty-nine _____

thirty-six _____

two thousand, one hundred seventy-four _____

seven thousand, thirty _____

five hundred twelve _____

twenty-nine _____

Read the sentence. Write the underlined number word in the blank as you would say it.

Earth's diameter is 7,926 miles.



Look at the number. Write the number words in the blank as you would say it.

747 _____

4,376 _____

6,045 _____

398 _____

1,211 _____

Name _____

Write the money value for the following fractions.

1. $\frac{1}{10}$ dollar = 10¢

5. $\frac{3}{4}$ dollar = _____

2. $\frac{5}{100}$ dollar = _____

6. $\frac{1}{20}$ dollar = _____

3. $\frac{1}{100}$ dollar = _____

7. $\frac{9}{10}$ dollar = _____

4. $\frac{1}{2}$ dollar = _____

8. $\frac{9}{100}$ dollar = _____

Write the fraction of a dollar for each amount of money.

Reduce to lowest terms.

1. 30¢ = _____

5. 45¢ = _____

2. 5¢ = _____

6. 60¢ = _____

3. 80¢ = _____

7. 25¢ = _____

4. 100¢ = _____

8. 75¢ = _____

