<table>
<thead>
<tr>
<th>Shape</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concave</td>
<td>One or more diagonals of a concave figure are outside the figure.</td>
<td></td>
</tr>
<tr>
<td>Convex</td>
<td>All diagonals of a convex figure are inside the figure.</td>
<td></td>
</tr>
<tr>
<td>Symmetrical</td>
<td>A figure that can be folded so that the two parts match exactly has line, or reflection, symmetry.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A figure that coincides with the original figure after it has been rotated less than 360° has rotational symmetry.</td>
<td></td>
</tr>
<tr>
<td>Nonsymmetrical</td>
<td>A nonsymmetrical figure has neither line nor rotational symmetry.</td>
<td></td>
</tr>
</tbody>
</table>

**Polygons**

<table>
<thead>
<tr>
<th>Regular polygons</th>
<th><em>Polygons</em> are simple closed curves with all straight sides. Regular polygons (shaded in green) have all sides and all angles congruent.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triangles (classified by properties of sides)</td>
<td><strong>Equilateral triangles</strong> have all sides congruent. <strong>Isosceles triangles</strong> have two sides congruent. <strong>Scalene triangles</strong> have no sides congruent.</td>
</tr>
<tr>
<td>Right</td>
<td>One angle of a <strong>right triangle</strong> is equal to 90°.</td>
</tr>
<tr>
<td>Acute</td>
<td>All angles of an <strong>acute triangle</strong> are less than 90°.</td>
</tr>
<tr>
<td>Obtuse</td>
<td>One angle of an <strong>obtuse triangle</strong> is greater than 90°.</td>
</tr>
<tr>
<td>Quadrilaterals (convex)</td>
<td>A quadrilateral is a polygon with four sides. <strong>Kite</strong> has two pairs of congruent adjacent sides. <strong>Trapezoid</strong> has exactly one pair of parallel sides. The opposite nonparallel sides of an <strong>isosceles trapezoid</strong> are congruent.</td>
</tr>
<tr>
<td>Parallelograms</td>
<td>A <strong>parallelogram</strong> is a quadrilateral with two pairs of parallel sides.</td>
</tr>
<tr>
<td>Kite</td>
<td><strong>Kite</strong> has two pairs of congruent adjacent sides.</td>
</tr>
<tr>
<td>Trapezoid*</td>
<td>A <strong>trapezoid</strong> has exactly one pair of parallel sides.</td>
</tr>
<tr>
<td>Isosceles trapezoid</td>
<td>The opposite nonparallel sides of an <strong>isosceles trapezoid</strong> are congruent.</td>
</tr>
<tr>
<td>Rectangle</td>
<td>A <strong>rectangle</strong> is a parallelogram with four right angles.</td>
</tr>
<tr>
<td>Rhombus</td>
<td>A <strong>rhombus</strong> is a parallelogram with all sides equal.</td>
</tr>
<tr>
<td>Square</td>
<td>A <strong>square</strong> is a parallelogram with four right angles and all sides equal.</td>
</tr>
</tbody>
</table>

* Some authors choose to define **trapezoid** as a quadrilateral with at least one pair of parallel sides. That definition is more inclusive and leads to the conclusion that all parallelograms are trapezoids. The Navigations books adopt the classical definition that a trapezoid is a quadrilateral with exactly one pair of parallel sides.

Adapted from Cathcart et al. (2000, pp. 294–95)
<table>
<thead>
<tr>
<th>Shape</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyhedra</td>
<td>Polyhedra are three-dimensional shapes with faces composed of polygons. Polyhedra have faces, edges, and vertices.</td>
<td>![Diagram of polyhedra]</td>
</tr>
<tr>
<td>Regular polyhedra</td>
<td>Regular polyhedra have faces consisting of the same kind of congruent regular polygons, and they have the same number of faces meeting at each vertex in the same way. There are five regular polyhedra (also known as Platonic solids).</td>
<td>![Examples of regular polyhedra]</td>
</tr>
<tr>
<td>Semiregular polyhedra</td>
<td>The faces of semiregular polyhedra consist of more than one kind of regular polygon, and each vertex is surrounded by the same arrangement of polygons. There are thirteen semiregular polyhedra (also known as Archimedean solids).</td>
<td>![Examples of semiregular polyhedra]</td>
</tr>
<tr>
<td>Prisms</td>
<td>Prisms have two parallel bases that are congruent polygons; the lateral faces are parallelograms formed by segments connecting corresponding vertices of the bases. Prisms are named for the shape of their bases (e.g., triangular prism, square prism, etc.).</td>
<td>![Examples of prisms]</td>
</tr>
<tr>
<td>Right prisms</td>
<td>Right prisms have lateral faces that are rectangles; the segments connecting corresponding vertices are perpendicular to the bases.</td>
<td>![Examples of right prisms]</td>
</tr>
<tr>
<td>Pyramids</td>
<td>Pyramids have bases that are polygons; the lateral faces are triangles that meet at a common vertex. Pyramids are named for the shape of their bases (e.g., triangular pyramid, square pyramid, etc.).</td>
<td>![Examples of pyramids]</td>
</tr>
<tr>
<td>Right pyramids</td>
<td>Right pyramids have lateral faces that are isosceles triangles. In a right pyramid, the segment connecting the vertex to the center of the base is perpendicular to the base.</td>
<td>![Examples of right pyramids]</td>
</tr>
<tr>
<td>Cylinders</td>
<td>Cylinders have curved lateral surfaces joining two parallel bases that are congruent circular regions. Segments connecting corresponding points on the bases are parallel.</td>
<td>![Examples of cylinders]</td>
</tr>
<tr>
<td>Right cylinders</td>
<td>The segment connecting the centers of the bases (the axis of the cylinder) of a right cylinder is perpendicular to the base.</td>
<td>![Examples of right cylinders]</td>
</tr>
<tr>
<td>Cones</td>
<td>Cones have curved lateral surfaces and bases that are circular regions.</td>
<td>![Examples of cones]</td>
</tr>
<tr>
<td>Right cones</td>
<td>The segment connecting the vertex to the center of the base (the altitude of the cone) is perpendicular to the base.</td>
<td>![Examples of right cones]</td>
</tr>
</tbody>
</table>

Adapted from Cathcart et al. (2000, pp. 286–88)
Constructing Geometric Figures in Coordinate Space

Name _______________________

Draw the coordinate plane on grid paper, construct the figures described in the left-hand column of the chart below, and write the coordinates of the figures in the right-hand column.

<table>
<thead>
<tr>
<th>Description of Figures</th>
<th>Coordinates of Figures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A square with sides of 3 units</td>
<td></td>
</tr>
<tr>
<td>2. A rectangle with dimensions 2 units by 4 units</td>
<td></td>
</tr>
<tr>
<td>3. A square with sides of 5 units and one vertex at ((-1, -1))</td>
<td></td>
</tr>
<tr>
<td>4. At least four other squares meeting the conditions in the previous description</td>
<td></td>
</tr>
<tr>
<td>5. A rectangle with a vertex at ((1, 2)) and dimensions 3 units by 4 units</td>
<td></td>
</tr>
<tr>
<td>6. At least four other rectangles meeting the conditions in the previous description</td>
<td></td>
</tr>
<tr>
<td>7. A rectangle whose perimeter is between 12 units and 16 units</td>
<td></td>
</tr>
<tr>
<td>8. Two other rectangles meeting the conditions in the previous description</td>
<td></td>
</tr>
<tr>
<td>9. A square with vertices at ((3, 4)) and ((3, 8))</td>
<td></td>
</tr>
<tr>
<td>10. Two other squares meeting the conditions in the previous description</td>
<td></td>
</tr>
<tr>
<td>11. A square with a perimeter between 16 units and 20 units and with a vertex at ((1, 2))</td>
<td></td>
</tr>
<tr>
<td>12. A right triangle with vertices at ((0, 0)) and ((0, -6))</td>
<td></td>
</tr>
<tr>
<td>13. An acute triangle with vertices at the coordinates given in the previous description</td>
<td></td>
</tr>
<tr>
<td>14. A right triangle with the vertex of the right angle at ((-5, -8)) and having legs measuring 4 units and 2 1/2 units</td>
<td></td>
</tr>
</tbody>
</table>
**Types of Graphs**

A *line plot* is a fast way to organize data. The possible data values are listed on a horizontal axis, and one X for each element in the data set is placed above the corresponding value. This display works best when the data set has fewer than twenty-five elements and when the range of possible values is not too great. A *dot plot* is similar to a line plot; small dots are used instead of Xs.

(Landwehr 1986, p. 5)

**Example**

<table>
<thead>
<tr>
<th>Line Plot</th>
<th>Number of Raisines per Box</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>x x x</td>
<td>x x x x</td>
</tr>
<tr>
<td>x x x</td>
<td>x x x</td>
</tr>
<tr>
<td>x x x</td>
<td>x x x</td>
</tr>
<tr>
<td>28 29 30 31 32 33 34 35 36 37 38 39 40</td>
<td>Number of Raisines</td>
</tr>
</tbody>
</table>

**Dot Plot**

*Time to Effect of Drug A*

**Bar Graph**

*Lengths of Six Cats*

**Case-Value Plot**

*Lengths of Six Cats*
Type of Graph

A circle graph, or pie chart, is a circle divided into parts, or sectors or wedges. Each part shows the percent of the data elements that are categorized similarly (e.g., grouped into intervals). The parts must sum to 100 percent. Circle graphs are often difficult to make, since each percent must be converted to an angle (i.e., the appropriate fraction of 360°) and the angles are sometimes difficult to draw.

(Moore 1991, pp. 180–81)

A stem plot (also called a stem-and-leaf plot) is a display that is most often used to “separate” the tens digits from the ones digits of the data values. The tens digits are called the stems, and the ones digits are called the leaves. Each leaf represents one of the data elements. Ordering the leaves on each stem from least to greatest often facilitates the interpretation of this display. This display works best when the data set contains more than twenty-five elements and when the data values span several decades of values. A stem plot can also be adapted to show simple decimal values—for example, whole numbers and tenths. A back-to-back stem plot can be used to compare two data sets.

(Landwehr 1986, pp. 7–9, 33)

A histogram is used when data elements could assume any value in a range—heights or weights of people, for example. The data are organized in equal intervals; the data values are marked on the horizontal axis. Bars of equal width are drawn for each interval, with the height of each bar representing either the number of elements or the percent of elements in that interval; the number or percent is marked on the vertical axis. The bars are drawn without any space between them.

(Moore 1991, pp. 191–92)
Fig. 1.2.
Types of graphs

<table>
<thead>
<tr>
<th>Type of Graph</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A box plot</strong> (also called a box-and-whiskers plot) is constructed by marking the “five-point summary” (i.e., the least and greatest values, the median, and the first and third quartiles), drawing a box to capture the interval from the first to the third quartile, and connecting the box to the least and greatest values with line segments. The data elements are not displayed individually, which makes it impossible to determine if there are gaps or clusters in the data. Box plots are very useful, however, for comparing data sets, especially when the data sets are large or when they have different numbers of data elements.</td>
<td></td>
</tr>
<tr>
<td><strong>Line Graph</strong></td>
<td></td>
</tr>
<tr>
<td>A line graph is typically used for continuous data to show the change in a variable—over time, for example. The time is marked on the horizontal axis, and the values of the variable are marked on the vertical axis. Each element of the sample is associated with a value for time and a value of the variable. Each pair of values is graphed, and the points are connected with line segments. It is important to look carefully at the scale marked on the vertical axis, since changing the scale of the vertical axis can dramatically change the visual impression of the graph.</td>
<td></td>
</tr>
<tr>
<td><strong>Scatterplot</strong></td>
<td></td>
</tr>
<tr>
<td>A scatterplot is used when two measurements are made for each element of the sample. The graph consists of points on a two-dimensional grid; the two coordinates of each point are determined by the two measurements for the corresponding element of the sample. A scatterplot is one of the best ways to determine if two characteristics are related.</td>
<td></td>
</tr>
</tbody>
</table>

(Landwehr 1986, pp. 57, 73)

(Moore 1991, pp. 181–83)

(Landwehr 1986, pp. 84–86, 137)
TV Watching

Name ________________________________

The forty-nine students in two seventh-grade classes were asked to report the number of hours they watched TV the previous week. Here are their data, listed in order from least to greatest number of hours.

Number of Hours of TV Watching in One Week

0, 0, 0, 1, 3, 3, 4, 4, 4, 5, 5, 5, 6, 6, 6, 6, 6, 6, 6, 6, 7, 7, 7, 7, 8, 8, 8, 8, 8, 9, 11, 11, 13, 13, 13, 13, 14, 14, 14, 15, 15, 20, 20, 20, 22, 22, 30

1. On grid paper, make a graph of the data that might help the parents of these students decide whether the students are watching too much TV.

2. About how many hours of TV did the majority of students watch per day? __________________________
   About how many hours per day is represented by the greatest value? __________________________
   By the least value? __________________________

3. Do you think these seventh-grade students spend too much time watching TV? ________________
   Do you think that if their parents read your graph, they would conclude that these students spend too much time watching TV? __________________________
   Explain how you reached your conclusions. ________________________________________________

__________________________

__________________________

__________________________

__________________________

Navigating through Data Analysis in Grades 6–8
In the sentence $2 \times 3 \times 4 = 24$, 2, 3, and 4 are called **factors** of 24. You multiply 2, 3, and 4 to get the **product** 24. If only two factors are used to get a product, then the two factors are called a **factor pair**. The number 18 has three factor pairs:

1. $1 \times 18 = 18$
2. $2 \times 9 = 18$
3. $3 \times 6 = 18$

A multiplication table can be used to find factor pairs. The numbers at the beginning of each column and row are factors that can be multiplied together to get a product.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>14</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>12</td>
<td>15</td>
<td>18</td>
<td>21</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>16</td>
<td>20</td>
<td>24</td>
<td>28</td>
<td>32</td>
<td>36</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>30</td>
<td>35</td>
<td>40</td>
<td>45</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>6</td>
<td>12</td>
<td>18</td>
<td>24</td>
<td>30</td>
<td>36</td>
<td>42</td>
<td>48</td>
<td>54</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>7</td>
<td>14</td>
<td>21</td>
<td>28</td>
<td>35</td>
<td>42</td>
<td>49</td>
<td>56</td>
<td>63</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>8</td>
<td>16</td>
<td>24</td>
<td>32</td>
<td>40</td>
<td>48</td>
<td>56</td>
<td>64</td>
<td>72</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>9</td>
<td>18</td>
<td>27</td>
<td>36</td>
<td>45</td>
<td>54</td>
<td>63</td>
<td>72</td>
<td>81</td>
</tr>
</tbody>
</table>

**Words to Know**

- **factor**: a number that is multiplied in a multiplication sentence.
  
  \[2 \times 3 \times 9 = 54\]
  
  2, 3, and 9 are factors of 54.

- **factor pair**: two factors that can be multiplied together to get a product.
  
  \[18 \times 3 = 54\]
  
  18 and 3 is a factor pair of 54.

- **product**: the answer to a multiplication problem.
  
  \[18 \times 3 = 54\]
  
  54 is the product of 18 and 3.

**Discuss**

Does every number have a factor pair?
A You can use counters to find factor pairs of a number.

DO Find all the factor pairs of 30

1. Write the factor pair that has 1 as a factor.

2. Arrange counters in equal rows and columns to show as many factor pairs as you can.

3. Write the factor pairs that the model shows.

The factor pairs are ________ and ________.

B You can use a multiplication table to find factor pairs of a number.

DO Find the factor pairs of 20

1. Write the first factor pair.

2. Look in the multiplication table for all the 20s. Write equations for each product of 20.

3. Write the factor pairs. Only list a factor pair one time.

The factor pairs of 20 are ________ and ________.

Multiplication Table can be found on p. 211.

PRACTICE

Write the factor pairs shown by the model of a number.

1. 16

[Diagram of counters]

Factor pairs: 1 × ____, ____ × ____, ____ × ____

Complete the factor pairs. Use a multiplication table.

2. 15

[Table with rows and columns]

1 × ____
____ × ____

3. 25

[Table with rows and columns]

1 × ____
____ × ____

4. 49

[Table with rows and columns]

1 × ____
____ × ____
POWER UP  Multiples

In the sentence $32 = 4 \times 8$, 32 is a multiple of 4 and 8. Use a multiplication table to tell if a number is a multiple of another number.

Is 24 a multiple of 6?

1. Find 6 in the top row.
2. Follow the column down to 24. So 24 is a multiple of 6.
3. Follow the row across from 24 to the number at the beginning of the row, 4. This means that 24 is also a multiple of 4.

Words to Know

multiple

A number that is the product of a given number and another number.

$2 \times 3 = 6$

6 is a multiple of both 2 and 3.

Discuss

What multiples of 3 are shown in the multiplication table above?

You can use a multiplication table to tell if a number is a multiple of another number.

Is 16 a multiple of 37?

1. Circle the row for 37.
2. List the multiples of 37 that are shown in the table.
3. See if the multiples of 37 include 16.

The multiples of 37 are 37 and 74.

So 16 is a multiple of 37.
You can write multiplication facts to help determine if a number is a multiple of another number.

1. Write some multiplication facts for 8.
   8 x 1 = 8
   8 x 2 = 16
   8 x 3 = 24
   8 x 4 = 32
   8 x 5 = 40
   8 x 6 = 48

2. List the multiples of 8 that you found.
   8, 16, 24, 32, 40, 48

3. See if the list includes 48.

Some multiples of 8 are

and

48, a multiple of 8.

You can use multiplication facts to find missing multiples.

1. Write some multiplication facts for 6.
   6 x 1 = 6
   6 x 2 = 12
   6 x 3 = 18
   6 x 4 = 24
   6 x 5 = 30
   6 x 6 = 36
   6 x 7 = 42
   6 x 8 = 48

2. Fill in the missing multiples of 6:
   6, 24, 30, 36, 42, 48

3. Determine which multiples are missing.
   6 x 3 = 18
   6 x 6 = 36
   6 x 7 = 42

4. Write the missing multiples.

The missing multiples are

and

PRACTICE

Write Is or Is not to tell if the number is a multiple of the other number.

1. 28 ______ a multiple of 7.
2. 48 ________ a multiple of 9.

Fill in the missing multiples.


To find the greatest common factor (GCF) of two numbers, list all the factors of each number. Then find the factors they have in common. Look for the greatest factor that appears in both lists.

Factors of 14: 1, 2, 7, 14
Factors of 35: 1, 5, 7, 35
The common factors of 14 and 35 are 1 and 7.
The greatest factor in both lists is 7.

To find the least common multiple (LCM) of two numbers, list the first few multiples of each number. Then find the multiples they have in common. Look for the least multiple that appears in both lists.

Multiples of 4: 4, 8, 12, 16, 20, 24
Multiples of 6: 6, 12, 18, 24, 30, 36
12 and 24 are two common multiples of 4 and 6.
The least multiple in both lists is 12.

Words to Know:
- greatest common factor (GCF): the common factor of two numbers that has the highest value.
  Factors of 18: 1, 2, 3, 6, 9, 18
  Factors of 27: 1, 3, 9, 27
  The GCF of 18 and 27 is 9.

- least common multiple (LCM): the common multiple of two numbers that has the smallest value.
  Multiples of 3: 3, 6, 9, 12, 15, 18, 21, 24, 27
  Multiples of 8: 8, 16, 24, 32
  The LCM of 3 and 8 is 24.

Discuss: How do you know when you can stop listing multiples when finding the LCM?

Lesson Link

Plug In
You can use arrays or a multiplication table to help you find factor pairs of a number.

Power Up
You can use multiplication facts to help you find multiples.

Go!
- List all the factors to help find all multiples.
  Factors of 2: 1, 2
  Multiples of 2: 2, 4, 6, 8

- Find the least common multiple (LCM) of two numbers.
WORK TOGETHER

You can use Grid Paper to find the GCF of two numbers.

- Find the greatest common factor of 18 and 12.
- The rectangles show the factor pairs and factors of 18 and 12.
- The factors that 18 and 12 have in common are 1, 2, 3, and 6.
- The greatest common factor is 6.

A: You can use Grid Paper to find the GCF of two numbers:

**DO**

Find the GCF of 42 and 56.

1. Draw rectangles to find the factor pairs of 42 and 56.
2. List the factors.
3. Write the factors that 42 and 56 have in common.
4. Write the greatest common factor.

DISCUSS

Zach used counters to find the LCM of 2 and 3.

Did Zach find the LCM, or does he need more counters? Explain.
PRACTICE

Find the GCF of the pair of numbers.

1. 7 and 27

GCF = ______

2. 24 and 30

GCF = ______

3. 10 and 14

GCF = ______

4. 32 and 60

GCF = ______

5. 18 and 45

GCF = ______

6. 12 and 72

GCF = ______

Find the LCM of each pair of numbers.

7. 10 and 12

LCM = ______

8. 8 and 4

LCM = ______
Find the LCM of the pair of numbers.

9. 3 and 7

LCM = ________

10. 9 and 12

LCM = ________

Solve.

11. The GCF of two numbers is 4. The two numbers are between 11 and 19. What are the two numbers?

12. The LCM of two numbers is a multiple of 10 and a multiple of 6. The two numbers are both less than 10. What is the LCM?

Discuss

Emma says that another way to find the LCM of two numbers is to multiply the two numbers and then divide the product in half. Use Emma's advice to find the LCM of the numbers below. Write is odd or not.

Find the LCM of 10 and 12.

10 and 12 are both multiples of 2.

Find the LCM of 5 and 6.

5 and 6 are both multiples of 1.

Find the LCM of 11 and 4.

11 and 4 have no common multiples.

Explain why you agree or disagree with Emma, based on the results you found.

11
FRUIT BASKETS

David is making baskets of fruit. He has 12 apples and 20 pears. If each basket will contain the same number of apples and the same number of pears, what is the greatest number of baskets he can make?

READ

What is the problem asking you to find?

The ________ number of baskets David can make.

PLAN

What do you need to find to solve the problem?

The GCF of ______ and ______.

How can you find the GCF of the two numbers?

List the factors of each number. Then find the GCF.

SOLVE

List the factors of each number to find the greatest common factor.


20 Factors: ______, ______, ______, ______, ______, and ______

The common factors are ______, ______, and ______. The GCF is ______.

CHECK

Model the problem. Draw an oval to represent each basket.

Divide 12 apples and 20 pears equally among the 4 baskets.

There are ______ apples in each. There are ______ pears in each.

The greatest number of baskets David can make is ______.
PRACTICE

Use the problem-solving steps to help you.

1. A pet store fills aquariums with fish. The store has 27 angelfish and 45 lionfish. If the aquariums will contain the same number of each kind of fish, what is the greatest number of aquariums that the store can fill?

2. Tara is making a scrapbook using 24 photos and 8 newspaper clippings. She wants to put the same number of photos and clippings on each page. What is the greatest number of scrapbook pages Tara can make?

3. Wyatt wants to make bags of party favors to give to his friends. Toy cars come in packages of 6. Gliders come in packages of 8. What is the least number of toy cars and gliders Wyatt can buy to have an equal number of each?

4. Frankie’s Meats sells frankfurters in packages of 10, and hot dog buns in packages of 8. What is the least number of frankfurters and buns Selma can buy to have an equal number of each for a barbecue?