Read the problem.

Kathleen and her mother went to the market. She helped her in buying the following ingredients:

- $\frac{3}{4}$ kilogram of chicken
- $\frac{1}{2}$ kilogram of sayote
- $\frac{1}{8}$ kilogram of ginger
- $\frac{1}{4}$ kilogram of onions

If we are going to arrange the weight of the ingredients bought from lightest to heaviest, which should come first? second? third? fourth? Why?
Arrange the following fractions in increasing order.

1) \( \frac{1}{2}, \frac{1}{5}, \frac{1}{3}, \frac{1}{6} \) ________________

2) \( \frac{1}{2}, \frac{4}{5}, \frac{3}{4}, \frac{2}{3} \) ________________

3) \( \frac{7}{2}, \frac{7}{5}, \frac{7}{4}, \frac{7}{3} \) ________________

4) \( \frac{2}{3}, \frac{3}{4}, \frac{5}{8}, \frac{1}{2} \) ________________

5) \( \frac{7}{8}, \frac{2}{3}, \frac{1}{4}, \frac{1}{6} \) ________________

Arrange the following fractions in decreasing order.

1) \( \frac{2}{5}, \frac{1}{2}, \frac{1}{8} \) ________________

2) \( \frac{3}{4}, \frac{5}{6}, \frac{4}{8} \) ________________

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Give any fraction whose value is between the given fractions.

1) \( \frac{7}{8}, \quad \_\_\_, \quad \frac{4}{5} \)

2) \( \frac{3}{5}, \quad \_\_\_, \quad \frac{6}{7} \)

3) \( \frac{1}{4}, \quad \_\_\_, \quad \frac{2}{3} \)

4) \( \frac{2}{5}, \quad \_\_\_, \quad \frac{7}{10} \)

5) \( \frac{1}{3}, \quad \_\_\_, \quad \frac{5}{9} \)
Activity 4

Given: \(\frac{2}{5}, \frac{3}{4}, \frac{1}{6}, \frac{3}{9}\)

1) If you arrange the fractions in increasing order, which fraction will be:
   a) first? ____
   b) last? ____

2) If you arrange the fractions in decreasing order, which fraction will be:
   a) first? ____
   b) third? ____

3) Arrange the set of fractions in:
   a) ascending order
   b) descending order

DRAFT
April 10, 2014
Aling Rosa, a market vendor, had five customers who bought items from her very early in the morning.

<table>
<thead>
<tr>
<th>Customers</th>
<th>Tomato</th>
<th>Onion</th>
<th>Garlic</th>
<th>Potato</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vicky</td>
<td>$\frac{1}{2}$ kg</td>
<td>4 kg</td>
<td>$\frac{1}{4}$ kg</td>
<td></td>
</tr>
<tr>
<td>Letty</td>
<td>$\frac{1}{8}$ kg</td>
<td>2 kg</td>
<td>$\frac{2}{5}$ kg</td>
<td></td>
</tr>
<tr>
<td>Beth</td>
<td>3 kg</td>
<td>$\frac{4}{6}$ kg</td>
<td>$\frac{1}{3}$ kg</td>
<td>$\frac{1}{2}$ kg</td>
</tr>
<tr>
<td>Maria</td>
<td>$\frac{1}{2}$ kg</td>
<td>$\frac{1}{8}$ kg</td>
<td>$\frac{1}{4}$ kg</td>
<td>$\frac{1}{3}$ kg</td>
</tr>
<tr>
<td>Anne</td>
<td>$\frac{3}{4}$ kg</td>
<td>$\frac{3}{8}$ kg</td>
<td>$\frac{1}{4}$ kg</td>
<td>$\frac{1}{2}$ kg</td>
</tr>
</tbody>
</table>

1) Arrange the weight of the items bought by Vicky in increasing order.
2) Arrange the weight of the items bought by Letty in decreasing order.
3) Among the items bought by Beth, which item is the heaviest? lightest?
4) What is the lightest item bought by Maria? Which item is the heaviest?
5) If you arrange the weight of the items bought by Anne in increasing order, which fraction will be the third in the arrangement?
Read the problem.

Carol and Tess are working together on their art project. Carol colored 1/2 of the square while Tess colored 4/8 of another square of the same size. Tess told Carol that she colored more parts and has a bigger fraction. Carol said that they just have equal parts. Who is right?

Carol's project                   Tess' project

How many parts were colored by Carol?
What about Tess? Who do you think is right? Carol or Tess?
Activity 1

Use the figures to find the equivalent fractions. Write your answer in the box.

1) \( \frac{2}{8} = \frac{}{8} \)

2) \( \frac{3}{5} = \frac{}{5} \)

3) \( \frac{4}{8} = \frac{}{8} \)

4) \( \frac{1}{3} = \frac{}{3} \)

5) \( \frac{3}{3} = \frac{}{3} \)

6) \( \frac{1}{2} = \frac{}{2} \)
**Activity 2**

Complete the pair of equivalent fractions. Use cross multiplication to find the missing numerator or denominator.

1) \( \frac{3}{27} = \frac{9}{\square} \)

2) \( \frac{2}{5} = \frac{\square}{45} \)

3) \( \frac{45}{81} = \frac{5}{\square} \)

4) \( \frac{\square}{15} = \frac{2}{3} \)

5) \( \frac{2}{4} = \frac{4}{\square} \)

6) \( \frac{5}{25} = \frac{\square}{5} \)

**Activity 3**

Give three fractions equivalent to each given fraction.

1) \( \frac{5}{6} \)

2) \( \frac{26}{52} \)

3) \( \frac{2}{11} \)

4) \( \frac{5}{4} \)

5) \( \frac{42}{56} \)
Which of these pairs are equivalent fractions? Copy the pairs in your notebook.

1) \( \frac{1}{4} , \frac{1}{8} \)  
2) \( \frac{3}{5} , \frac{6}{10} \)  
3) \( \frac{15}{20} , \frac{3}{4} \)  
4) \( \frac{1}{5} , \frac{5}{25} \)  
5) \( \frac{4}{5} , \frac{8}{15} \) 

A. Copy the fractions that are equivalent in your notebook.

1) \( \frac{4}{5} , \frac{6}{10} , \frac{8}{8} \)  
2) \( \frac{6}{14} , \frac{4}{8} , \frac{3}{7} \)  
3) \( \frac{1}{3} , \frac{3}{9} , \frac{6}{8} \)  
4) \( \frac{5}{6} , \frac{15}{18} , \frac{10}{18} \)  
5) \( \frac{4}{16} , \frac{6}{27} , \frac{8}{36} \)  
6) \( \frac{2}{3} , \frac{6}{9} , \frac{4}{10} \)
B. Look for a pattern. Complete each set of equivalent fractions. Write your answer in your notebook.

1) \[\frac{1}{2}, \frac{2}{4}, \frac{3}{6}, \underline{\quad}, \underline{\quad}, \underline{\quad}\]

2) \[\frac{1}{3}, \frac{2}{6}, \frac{3}{9}, \underline{\quad}, \underline{\quad}, \underline{\quad}\]

3) \[\frac{1}{4}, \frac{2}{8}, \frac{3}{12}, \underline{\quad}, \underline{\quad}, \underline{\quad}\]

4) \[\frac{1}{5}, \frac{2}{10}, \frac{3}{15}, \underline{\quad}, \underline{\quad}, \underline{\quad}\]

5) \[\frac{1}{10}, \frac{2}{20}, \frac{3}{30}, \underline{\quad}, \underline{\quad}, \underline{\quad}\]
Study the picture.

David and Vince are playing darts. Look at where their darts landed.

How will you describe the figure where David’s and Vince’s darts landed?
What did they use to name the figure where their darts landed?
Complete the puzzle.

1) A shape with two opposite sides equal.
2) Closed figures with no sides.
3) A figure with three sides.
4) A shape with four equal sides.
1) Name the different rays in this figure.

```
G
  ^
 / 
H   I
  |
J
```

2) Name the different line segments.

```
R---E---M---Y
  |   |   |
  |   |   |
  |   |   |
  |   |   |
```

3) Name the lines.

```
N---Q---O
  |   |
  |   |
  |   |
  |   |
P---O
```
Fill in the blanks.
1) A _____ has two arrow heads.
2) The geometric figure with one endpoint and an arrowhead is called a _____.
3) A _____ has two endpoints.
4) _____ can be denoted by letters.

Answer the following:
1) Name the points.
2) Identify the given line.
3) Name the line segments.
4) Identify the given rays.
Choose the letter of the correct answer.

1) A dot is a representation of a _______________.
   a. line  
   b. ray  
   c. point  
   d. line segment  

2) _______ extend without end in opposite directions.
   a. Points  
   b. Lines  
   c. Segments  
   d. Dots  

3) A ray is a part of the line composed of endpoint and __________.
   a. an arrowhead  
   b. endpoints  
   c. a line  
   d. dots  

4) A line segment is also a part of a line defined by _______ endpoints.
   a. 1  
   b. 2  
   c. 3  
   d. 4  

5) This symbol \rightarrow \rightarrow represents a __________.
   a. segment  
   b. ray  
   c. line  
   d. point
Answer the following in your notebook.

1) Name and draw line segments to form a Christmas star.

2) Use letters to name the points, line and rays.
Study the pairs of line segments.

Which line segments are congruent? Why?

Copy the pair of line segments that are congruent in your notebook.

1) 2) 3) 4) 5)
Look at the two rectangles. Determine if the lengths of the sides are equal. Use a ruler to measure the sides.

Then, make a list of congruent line segments. Write your answer on your paper.

Which pairs of segments are congruent? Measure and compare. Write your answer in your notebook.
Study the figure. Identify the congruent line segments.

List down objects that you have seen in your house or community which represent congruent line segments. Write your answer in your notebook.
Study the figures below.

**Figure A**

**Figure B**

**Figure C**

1) Describe the lines in Figure A. What do we call these lines?
2) Describe the lines in Figure B. What do we call these lines?
3) Describe the lines in Figure C. What do we call these lines?
Identify the lines in the figure that fall under the given classifications.

1) Parallel Lines
   ___________________________________________________
   ___________________________________________________

2) Perpendicular Lines
   ___________________________________________________
   ___________________________________________________

3) Intersecting Lines
   ___________________________________________________
   ___________________________________________________
Identify parallel, perpendicular and intersecting lines in the given pictures.

1) 

2) 

3)
Determine whether the given lines are parallel, intersecting or perpendicular.

1) 
2) 
3) 
4) 
5) 
6)
Activity 4

Name the objects that show parallel lines, intersecting lines and perpendicular lines.
Lesson 66

Symmetry in the Environment and in Design

What do you see?

How will you describe this butterfly?

Activity 1

Work with your partner and do the following.
You need: paper, pencil, crayons, scissors

1) Fold a sheet of paper in half.
2) Draw half of a face on the paper, using the fold as the line of symmetry.
3) With the paper folded, cut holes for the eyes, nose, and mouth. Cut out the shape of the face.
4) Unfold the paper. Color your mask the same on each side of the fold.
5) Discuss with your partner: Where is the line of symmetry in the mask?
Activity 2

Work with your partner and do the following.
You need: paper, pencil, crayons

1) Fold the paper in half length-wise.

2) Then write your name with a dark marker or crayons in large cursive letters on the fold.

3) Then turn the paper over so that you can trace your name on the other side of the paper.

4) When you unfold the paper, your name should make a symmetrical design, with the fold line being the line of symmetry.

5) After you have your names drawn, look at the design and try to make some kind of creature out of it by coloring it and adding other lines.

Activity 3

Draw your own picture showing symmetry in your notebook.
You need: paper, pencil, crayons
Which of the following images of animals below does not show symmetry? Name the animals.

![Images of animals: a cat, a bug, an owl, a duck, and a dog.]

Activity 5

Draw the following on your paper:

1. A symmetrical alien. Be creative and include lots of details. Draw the line of symmetry.

2. A symmetrical object found in your classroom or school grounds. Color your drawing. Draw the line of symmetry.
Look at the picture.

What can you say about the picture?
What does the broken line tell?
Name the figure and show the line of symmetry.

1) \( \triangle \)
2) \( \square \)
3) \( \text{ellipse} \)
4) \( \text{bowling pin} \)
5) \( \text{scoop} \)
6) \( \text{cone} \)
7) \( \star \)
8) \( 8 \)
Activity 2

A. Tell whether the dotted line shows a line of symmetry. Write yes or no on your paper.

B. Draw a line of symmetry for each figure.
Does each figure appear to have a line of symmetry? If yes, trace the line of symmetry.
Activity 4

Which of these numbers have no lines of symmetry? Explain. Draw the line of symmetry for the symmetrical figures.

0  1  2
3   4   5
6   7   8
9
Lesson 68

Completing a Symmetric Figure

Look at the picture. Can you draw the other half? What figure will you form?

Draw the second half of each symmetrical shape. What shape did you form?

Activity 1

1) 2) 3) 4)
Activity 2

Draw the other half of the following figures with respect to their lines of symmetry.

1)  
2)  
3)  
4)  

Activity 3

Draw the other half of the shape to make it symmetrical.

1)  
2)  
3)  
4)  

Activity 4

Sketch the other half. Identify the resulting objects.

1) 2) 3) 4) 5)
What can you say about the pictures above? How will you describe each picture?

Activity 1

Show that these shapes tessellate by tiling the "floor". We already started it for you.

1)
Activity 2

Write the number of triangles that covers the surfaces below.

1) 2) 3) 4) 5)
Activity 3

Tell whether the given design shows tessellation. Explain.

1) 2)

3) 4)
Activity 4

Choose the figure which can tessellate. Make a cut-out of that figure using a colored paper and make a design showing tessellation.
Lesson 70

Determining the Missing Term in a Pattern

Look at the pattern. What shape comes next? What comes before the first shape?

Look at the next set of figures. What figure should be put on the line?

Now, look at these numbers. What is the next number in the pattern? Why?

What numbers should be put on the blanks? Why?

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April 10, 2014

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**Activity 1**

Look at the pattern under Column A in each row. Copy the picture in Column B that will complete the pattern in your notebook.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) <img src="image1" alt="Pattern 1" /></td>
<td><img src="image2" alt="Pattern 2" /></td>
</tr>
<tr>
<td>2) <img src="image3" alt="Pattern 3" /></td>
<td><img src="image4" alt="Pattern 4" /></td>
</tr>
<tr>
<td>3) <img src="image5" alt="Pattern 5" /></td>
<td><img src="image6" alt="Pattern 6" /></td>
</tr>
<tr>
<td>4) 48   ____  56  60  64  68</td>
<td>52  54</td>
</tr>
<tr>
<td>5) <img src="image7" alt="Pattern 7" /></td>
<td><img src="image8" alt="Pattern 8" /></td>
</tr>
</tbody>
</table>
Activity 2

Find the missing terms in the following pattern.

1) 173 170 167 164 ___ ___
2) ♫♫♫♫♫♫♫♫♫♫♫♫♫♫♫♫♫♫♫♫♫♫♫♫♫♫♫
3) A B D E G ___ ___ K M
4) ▲▲►▼◄▲ ___ ___ ▼▼
5) ⇐ ⇐ ⇒ ___ ⇐ ⇒ ⇐ ___

Activity 3

Draw a repeating pattern using

1) □ and △

2) ◇ and □□

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Copy the given pattern on your paper. Fill in the missing numbers to complete the given pattern.

1)  ____ , 19 , 22 , ____ , 28, 31, 34
2) 24, ____ , 34 , 39 , 44 , 49, ____
3) 36, 33, 30, ____ , ____ , 21 , 18
4) 525, 500, ____ , ____ , ____ , 400, 375
Read and analyze the problem. Show your solution in your notebook.

Joan receives PhP5.00 on Monday, PhP8.00 on Tuesday, PhP11.00 on Wednesday and PhP14.00 on Thursday. Following the same pattern, how much will she receive on Friday, Saturday and Sunday? How much money will she receive in one week?