**2019-2020 HISD @ H.O.M.E. Distance Learning**
**Mathematics – Grade 5**
**April 13-24, 2020 – Week 1**

| Monday – 30 minutes | |
|---|---|
| Activity/ Task<br><br>Area and Perimeter | Cut out the digit cards. Shuffle the digit cards and place them face down in a pile. Select 2 digit cards. One digit card represents the length and the second digit card represents the width of a rectangle. Draw the rectangle on the grid paper and then calculate the perimeter (2l + 2w) and area (l x w) of your rectangle. Record the information in a table similar to the one below. |
| Resources | Handout: Grid Paper<br>Handout: Digit Cards |

Image by HISD Curriculum using Microsoft Word

| length | width | perimeter | area |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Find the area and perimeter of **four more** rectangles, using the digit cards.

On the back of the grid paper, describe the difference between area and perimeter using the following sentence stem:
*The difference between area and perimeter is* _____.

Then explain the process of calculating both area and perimeter. A sentence stem is provided for you, if needed.
*I can calculate area by* _____. *I can calculate perimeter by*_____.


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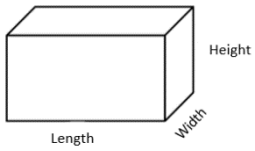
**2019-2020 HISD @ H.O.M.E. Distance Learning**
**Mathematics – Grade 5**
**April 13-24, 2020 – Week 1**

| Tuesday – 30 minutes | |
|---|---|
| Activity / Task<br><br>Perimeter, Area, and Volume | Shuffle the digit cards from yesterday and place them face down in a pile. Select 3 digit cards. Like yesterday, these digit cards represent the length, width, and height of a rectangular prism. Draw the rectangular prism on the isometric grid paper and then calculate the perimeter (2l + 2w), area (l x w), and volume (l x w x h) of the rectangular prism drawn. Record the information in a chart similar to the one below.<br><br>  <br><br>Image by HISD Curriculum using Microsoft Word<br><br>Find the area, perimeter, and volume of **five more** rectangular prisms, using the digit cards.<br><br>On the back of the isometric grid paper, describe the difference between area and volume using the following sentence stem.<br>*The difference between area and volume is* _____.<br><br>Then explain the process of calculating both area and perimeter. A sentence stem is provided for you, if needed.<br>*I can calculate area by* _____. *I can calculate volume by*_____. |
| Resources | Handout: Isometric Grid paper<br>Handout: Digit Cards |

| length | width | height | perimeter | area | volume |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
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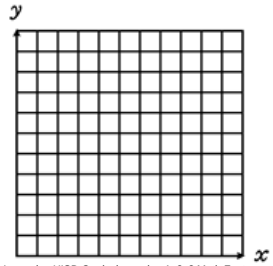
**2019-2020 HISD @ H.O.M.E. Distance Learning**
**Mathematics – Grade 5**
**April 13-24, 2020 – Week 1**

| Wednesday – 30 minutes | |
|---|---|
| Activity / Task<br><br>Graphing on a Coordinate Grid | Shuffle the digit cards from yesterday and place them face down in a pile. Select two digit cards at a time. One digit card will represent the x-coordinate and the second digit card will represent the y-coordinate. Record your information in a table similar to the one below. Plot your ordered pairs in a coordinate grid.<br><br>Just a reminder: The X-coordinate is the first number in an ordered pair and tells you to move moving from left to right, starting at the origin. The Y-coordinate is the second number in an ordered pair and tell you to move up and down, starting at the origin.<br><br>X \| Y \| Ordered Pairs (x, y)<br><br>Image by HISD Curriculum using Microsoft Word<br><br>  <br><br>Image by HISD Curriculum using 1, 2, 3 Math Fonts<br><br>Record your information in a table and plot your ordered pairs in a coordinate grid with **five more** sets of digit cards.<br><br>Then explain the process of plotting ordered pairs on a coordinate grid. A sentence stem is provided for you, if needed.<br><br>*When plotting ordered pairs, first I plot the ____ coordinate, then I plot the ____coordinate.*<br><br>*Does it matter which number in an ordered pair you graph first? Why?* |
| Resources | Handout: Digit Cards<br>Handout: Grid Paper<br>Handout: Coordinate Grid |



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**2019-2020 HISD @ H.O.M.E. Distance Learning**
**Mathematics – Grade 5**
**April 13-24, 2020 – Week 1**

## Thursday – 30 minutes

**Activity / Task**

Graphing on a Coordinate Grid with an Input and Output Table

Cut out the rule cards. Then, shuffle the rule cards and place them face down in a pile. Select one rule card and create an input and output table that matches the rule. Plot at least four ordered pairs on the coordinate grid.

| Input (x) | Rule | Output (y) | Ordered Pair |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

Image by HISD Curriculum using Microsoft Word

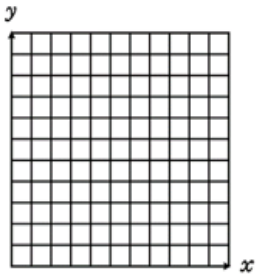


Image by HISD Curriculum using 1, 2, 3 Math Fonts

Record your information in an input and output table and plot your ordered pairs in a coordinate grid with **five more** sets of rule cards.

**Resources**

Handout: Rule Cards
Handout: Input and Output Table
Handout: Coordinate Grid

## Friday – 30 minutes

**Activity / Task**

Graphing on a Coordinate Grid with an Input and Output Table

Record the missing values and determine the rule that describes what happens to the input value (x) to determine the output value (y). Then name and plot the order pairs on a coordinate grid.

| Input (x) | Output (y) | Ordered Pairs (x, y) |
|---|---|---|
| 1 | 5 | |
| 2 | 10 | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| Rule | | |

Image by HISD Curriculum using 1, 2, 3 Math Fonts

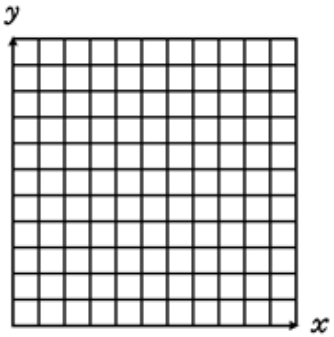


Image by HISD Curriculum using 1, 2, 3 Math Fonts

Complete the Numerical Pattern handout.

**Resources**

Handout: Coordinate Grid
Handout: Numerical Pattern Handout



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**2019-2020 HISD @ H.O.M.E. Distance Learning**
**Mathematics – Grade 5**
**April 13-24, 2020 – Week 2**

## Monday – 30 minutes

| | |
|---|---|
| Activity / Task<br><br>Solve word problems using data from a frequency table | Students at Chatham Elementary took a survey on the value of quarters they donated for a fundraising event. The **frequency table** below shows the frequency of boys and girls who donated different money amounts.<br><br>**Frequency**: How often an item, a category, a number, or a range of numbers occurs.<br>**Frequency table**: A table that shows how often an item, a number, a category, or a range of numbers occurs (tallies and/or numerical counts are used to record frequencies).<br><br>Money Amounts Collected: Girls<br>Money Amounts Collected: Boys<br>Images by HISD Curriculum using Microsoft Word<br><br>Using the information in the tables above, answer the following questions on a piece of paper.<br><br>• How many boys participated in the survey?<br><br>• How many girls participated in the survey?<br><br>• Which money amount was donated most frequently from the girls? Explain your thinking using the stem below if needed.<br><br>*I know that $_____ was donated most frequently to the girls because _____.*<br><br>On the same piece of paper and the help of a family member, create at least **3 more questions and find the solution** using the above frequency tables. *For example: How many more girls collected $4.25 than boys? (3)* |
| Resources | |

| Amount | Frequency |
|---|---|
| $3.25 | 4 |
| $3.75 | 3 |
| $4.25 | 7 |
| $4.75 | 4 |
| $5.25 | 2 |

| Amount | Frequency |
|---|---|
| $3.25 | 6 |
| $3.75 | 2 |
| $4.25 | 10 |
| $4.75 | 3 |
| $5.25 | 2 |


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**2019-2020 HISD @ H.O.M.E. Distance Learning**
**Mathematics – Grade 5**
**April 13-24, 2020 – Week 2**

## Tuesday – 30 minutes

| | |
|---|---|
| Activity / Task<br><br>Solve word problems using data from a bar graph | Complete the frequency table below that corresponds to the data in the **bar graph** and answer the questions that follow.<br><br>**Bar Graph:** - A graph that uses horizontal or vertical bars to display countable data, may include frequencies of an item, a category, a number, or a range of numbers. |

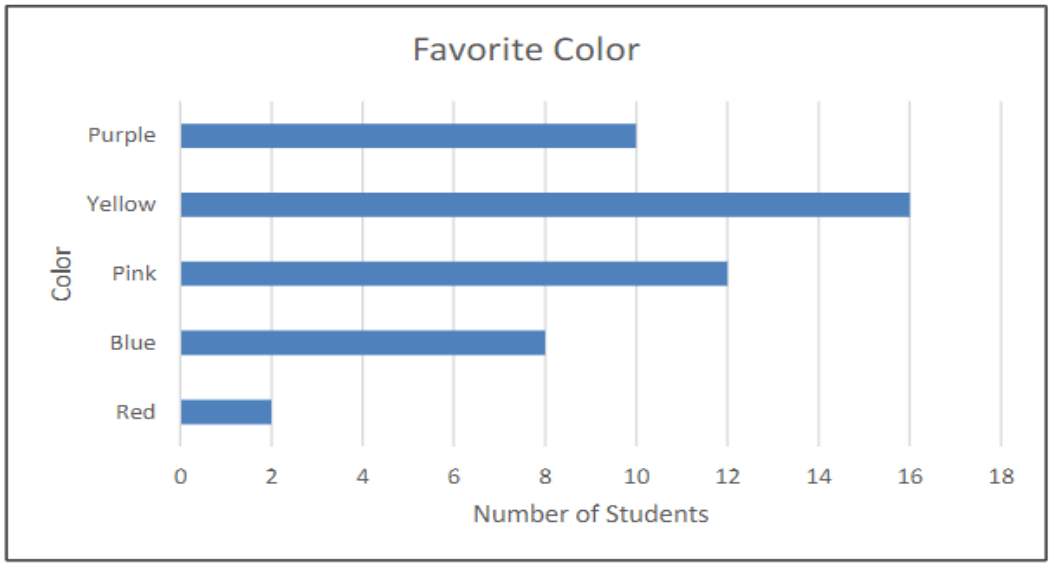


Image by HISD Curriculum using Microsoft Excel

Favorite Colors

| Color | Frequency |
|---|---|
| Red | 2 |
| | |
| | |
| Yellow | |
| | 12 |

Using the information in the graphs above, answer the following questions on a piece of paper.

- How many total students were surveyed?
- How many students chose yellow and blue?
- How many more students chose pink and blue than purple?

On the same piece of paper, create *at least 3 more* questions using the data from the bar graph or frequency table. Work with a family member to find the solutions.

| | |
|---|---|
| Resources | |



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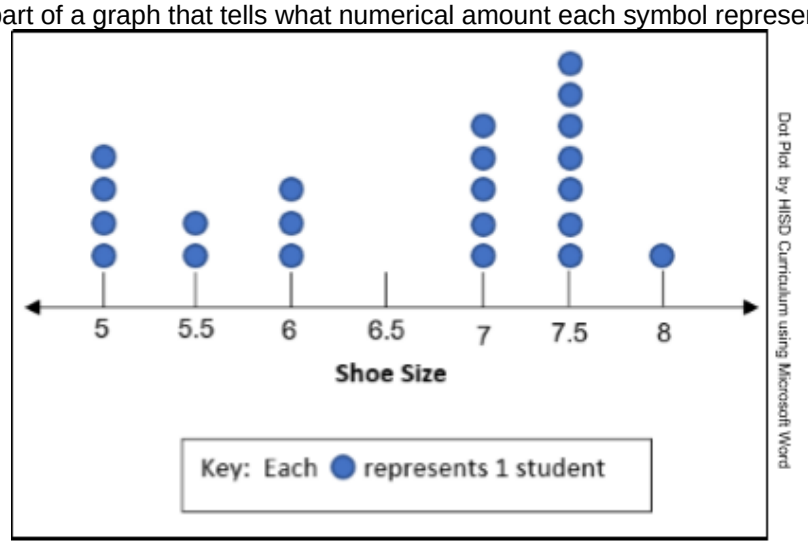
**2019-2020 HISD @ H.O.M.E. Distance Learning**
**Mathematics – Grade 5**
**April 13-24, 2020 – Week 2**

| Wednesday – 30 minutes | |
|---|---|
| Activity / Task<br><br>Solve word problems using data from a dot plot | Use the data from the **dot plot** to answer the questions below.<br><br>**Dot Plot:** A graph that uses dots to show how data is clustered; dot plots may be used to represent frequencies.<br><br>**Key:** The part of a graph that tells what numerical amount each symbol represents.<br><br>  <br><br><br>• How many total students were surveyed?<br>• How many students have a shoe size smaller than 7.5?<br>• How many students have a shoe size larger than 5.5 but less than 7?<br>• How many more students have a shoe size of 5.5 and 7.5 than a shoe size of 7?<br>• How many times as many students have a shoe size of 5 than 5.5?<br><br>Use the grid paper to create a frequency table using the data from the dot plot above. (Refer to Monday's lesson for an example, if needed.) |
| Resources | Handout: Grid Paper |



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**2019-2020 HISD @ H.O.M.E. Distance Learning**
**Mathematics – Grade 5**
**April 13-24, 2020 – Week 2**

| Thursday – 30 minutes | |
|---|---|
| Activity / Task<br><br>Solve problems using data from a frequency table | Look at the frequency table below. What do you notice? What do you wonder? |

Students' Half-Hour Running Distance

| Distance in Miles | Frequency |
|---|---|
| $\frac{3}{8}$ | 4 |
| $1\frac{1}{8}$ | 0 |
| $1\frac{7}{8}$ | 6 |
| $2\frac{5}{8}$ | 3 |
| $3\frac{3}{8}$ | 5 |
| $4\frac{1}{8}$ | 3 |

Table by HISD Curriculum using Microsoft Word

Use the data represented in the frequency table to answer the following questions.

- How many total students were surveyed?
- Why is it important to have a key?
- Coach Garcia recorded the four shortest distances that his students ran. What was the total distance these four students ran?

Use the grid paper to create a dot plot using the data provided from the frequency table. (Refer to Wednesday's lesson for an example,)

| Resources | Handout: Grid Paper |
|---|---|


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**2019-2020 HISD @ H.O.M.E. Distance Learning**
**Mathematics – Grade 5**
**April 13-24, 2020 – Week 2**

| Friday – 30 minutes | |
|---|---|
| Activity / Task<br><br>Solve problems using data from a stem and leaf plot | Look at the **stem and leaf plot** below.<br><br>**Stem-and-Leaf Plot**: A system used to organize groups of data in numerical order according to place value.<br><br>**Stem:** The digit s) in the greater place value; written to the left of the vertical line in a stem-and-leaf plot; organized either from least to greatest or greatest to least; the stem represents the place values preceding the last digits<br><br>**Leaf:** The digit(s) in the lesser place value(s); written to the right of the vertical line in a stem-and-leaf plot. The leaves provide the frequency counts for the range of numbers in that row of the stem-and-leaf plot; numbers represented as leaves are listed from least to greatest moving from left to right; the leaves represent the last digit<br><br>Recorded Temperatures in Houston, Texas<br>October 2014<br><br>Stem \| Leaves<br>7 \| 7 8<br>8 \| 2 4 4 4 5 6 6 6 6 6 7 8 8<br>9 \| 0 0 0 1 2 2<br><br>Key: 8 \| 2 means 82° Fahrenheit<br><br>Stem-and-Leaf plot created by HISD Curriculum using Microsoft Word<br><br>Use the data from the stem-and-leaf plot to answer the following questions:<br>• How many daily temperatures are recorded in the stem and leaf plot?<br>• How many times did the daily high temperature reach 90°?<br>• What is the difference between the lowest temperature and the highest temperature?<br>• How many days was the high temperature above 82 but below 90?<br>• According to the stem-and-leaf plot, what was the highest temperature?<br><br>Complete the Texans Stem-and-Leaf Plot activity.<br><br>On a piece of paper, describe how the different graphs are similar and different. Use the following sentence stems, if needed.<br><br>_____ *and* _____ *are the same because* _____. *They are different because* _____. |
| Resources | Handout: Texans Stem-and-Leaf Plot Activity |



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INSPIRING TEACHING, IGNITING LITERACY & LEARNING.

# Coordinate Planes

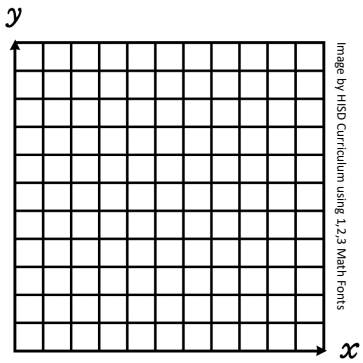
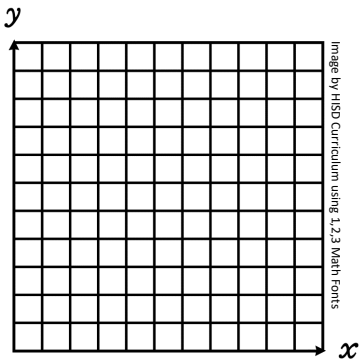


Image by HISD Curriculum using 1,2,3 Math Fonts



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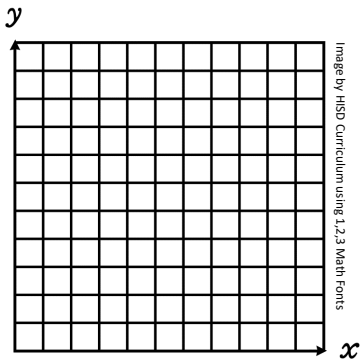
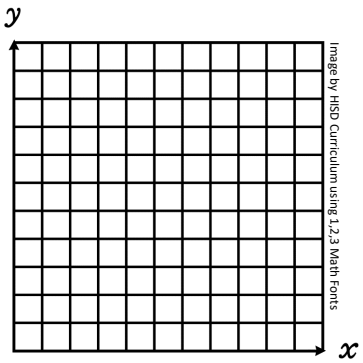


Image by HISD Curriculum using 1,2,3 Math Fonts



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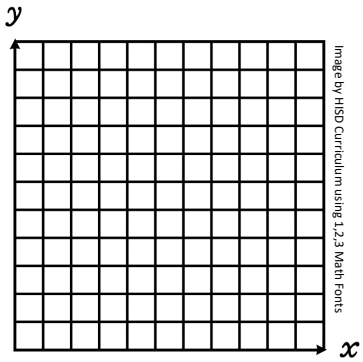

Image by HISD Curriculum using 1,2,3 Math Fonts

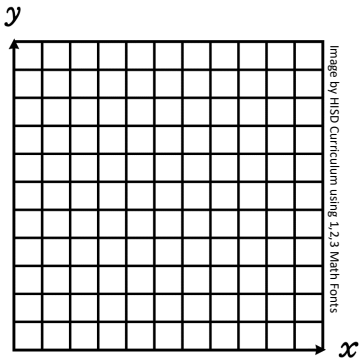

Image by HISD Curriculum using 1,2,3 Math Fonts

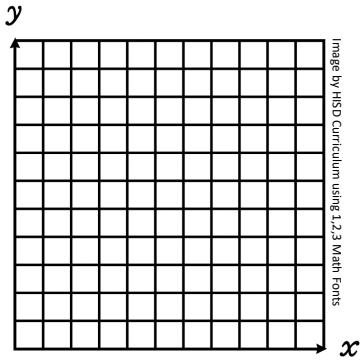

Image by HISD Curriculum using 1,2,3 Math Fonts

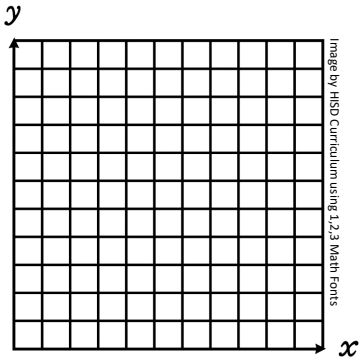

Image by HISD Curriculum using 1,2,3 Math Fonts

GLOBAL GRADUATE

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Updated: April 2, 2020

| | | | |
|---|---|---|---|
| 0 | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 |
| 8 | 9 | 0 | 1 |
| 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 |

**Stem and Leaf Task Card**

The data below represents the scores the Texans and an opposing team scored for each game this season.

| Date | Results |
|---|---|
| 9/9/19 | **Texans 28** Saints 30 |
| 9/15/19 | Jaguars 12 **Texans 13** |
| 9/22/19 | **Texans 27** Chargers 20 |
| 9/29/19 | Panthers 16 **Texans 10** |
| 10/6/19 | Falcons 32 **Texans 53** |
| 10/13/19 | **Texans 31** Chiefs 24 |
| 10/20/19 | **Texans 23** Colts 30 |
| 10/27/19 | Raiders 24 **Texans 27** |
| 11/3/19 | **Texans 26** Jaguars 3 |
| 11/17/19 | **Texans 7** Ravens 41 |
| 11/21/19 | Colts 17 **Texans 20** |
| 12/1/19 | Patriots 22 **Texans 28** |
| 12/8/19 | Broncos 38 **Texans 24** |
| 12/15/19 | **Texans 24** Titans 21 |
| 12/21/19 | **Texans 23** Buccaneers 20 |
| 12/29/19 | Titans 35 **Texans 14** |

Create a stem-and-leaf plot for the number of points the Texans scored during the 2019 football season.

| Stem | Leaf | | | | |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
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# Input-Output Tables

| Input (x) | Rule | Output (y) | Ordered Pair |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

| Input (x) | Rule | Output (y) | Ordered Pair |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

| Input (x) | Rule | Output (y) | Ordered Pair |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

| Input (x) | Rule | Output (y) | Ordered Pair |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

| Input (x) | Rule | Output (y) | Ordered Pair |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

| Input (x) | Rule | Output (y) | Ordered Pair |
|---|---|---|---|
| | | | |
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| | | | |
| | | | |

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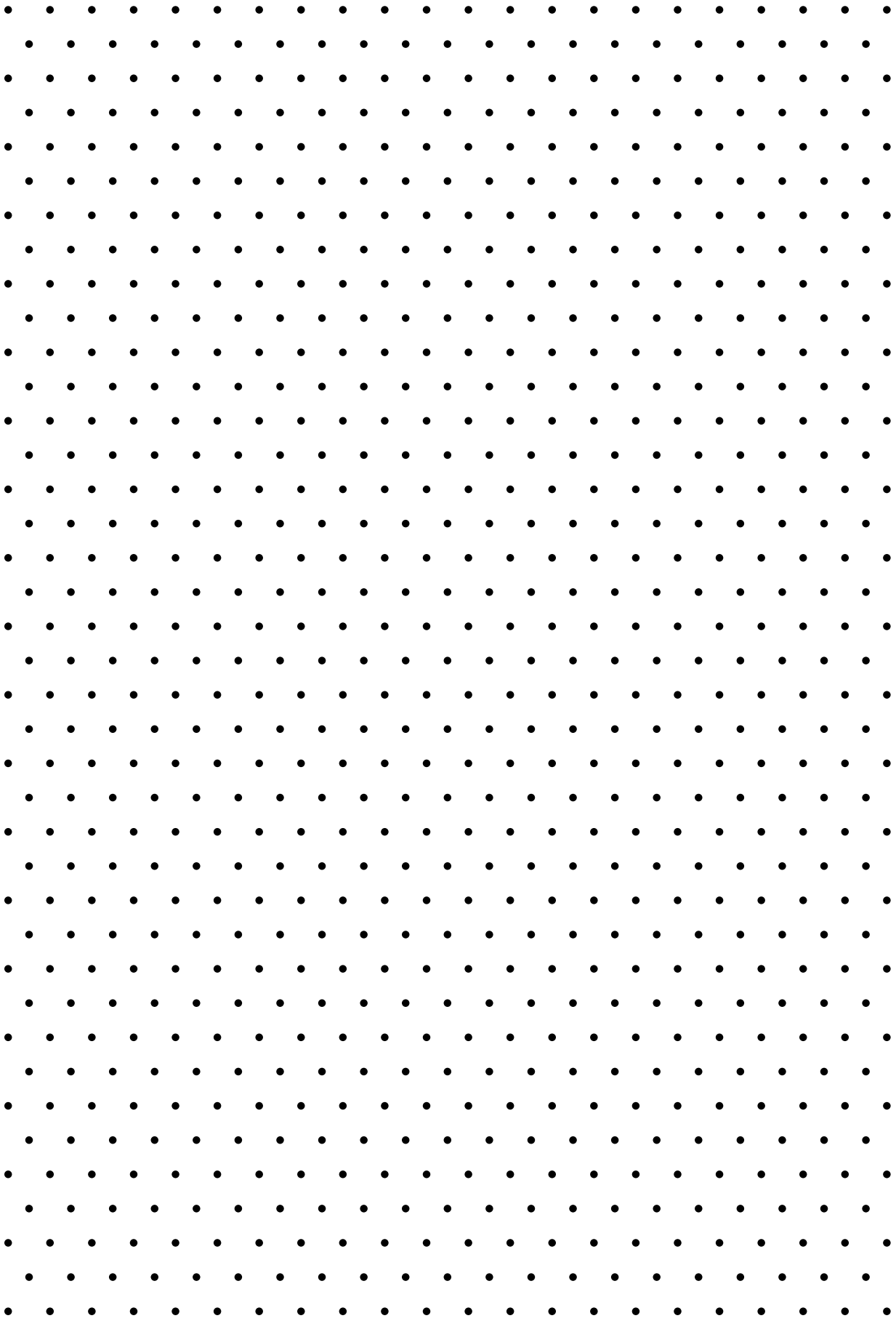

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# Numerical Patterns

Record the missing values and determine the rule that describes what happens to the input value (x) to determine the output value (y). Then name and plot the first five order pairs on the coordinate grid for the following problems.

| Input (x) | Output (y) | Ordered Pair (x,y) |
|---|---|---|
| 1 | 3.5 | |
| 2 | 4.5 | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| Rule | | |

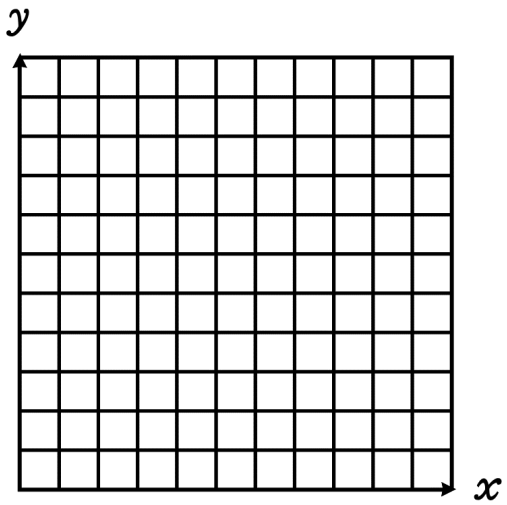


Image by HISD Curriculum using 1,2,3 Math Fonts

| Input (x) | Output (y) | Ordered Pair (x,y) |
|---|---|---|
| 1 | 2 | |
| 2 | 4 | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| Rule | | |

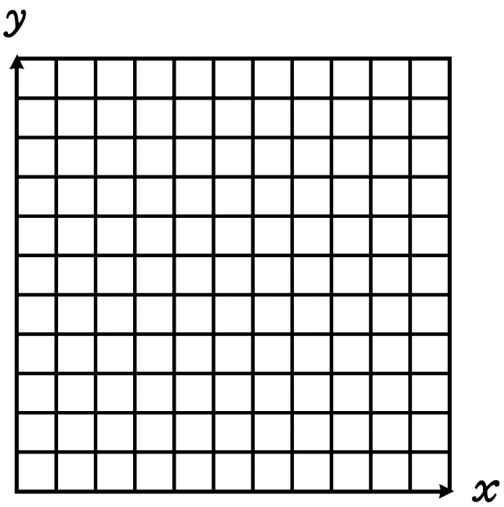


Image by HISD Curriculum using 1,2,3 Math Fonts

| | | |
|---|---|---|
| $y = 0.1x$ | $y = x \div 5$ | $y = x + 7$ |
| $y = x \div 4$ | $y = 2x$ | $y = x - 2.5$ |
| $y = x + 6.25$ | $y = x - 3$ | $y = 4x$ |