

## Make a Line Graph

### Skill 5 - 8G

#### Answers to test question 8G.

#### Make a Line Graph

Monthly Book Sales	
Month	Number Sold
September	7
October	6
November	4
December	5
January	6
February	2

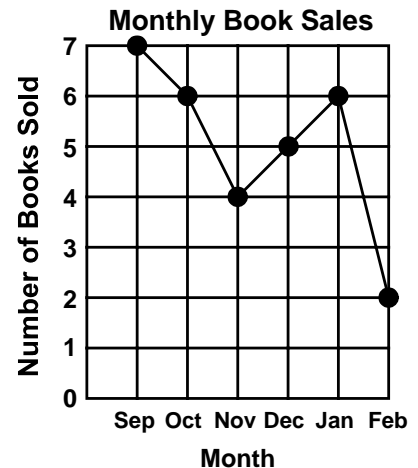
1. Use the data in the table to make a line graph.

2. Write the title along the top of the grid.

3. Write a scale using the appropriate interval along the left side (vertical axis) of the grid. Label the scale.

4. List each month along the bottom of the graph (horizontal axis) and label this section.

5. Use the data in the table to plot each point and connect the points with lines.



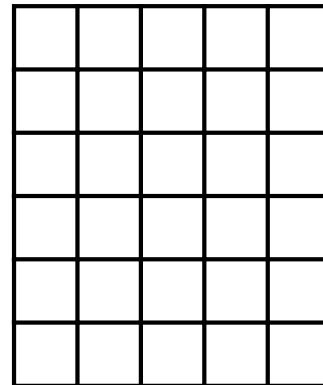
1. What trend do you see for September through November?

**Answer:** The book sales are decreasing.

2. During which months did book sales increase? November has 4 sales. In December sales increased by 1 sale to 5 sales. In January sales increased 1 more sale to 6 sales. The **answer is** sales increased during December and January.

1. Use the data in the table to make a line graph. Follow the instructions above. After the graph is complete, use the graph to answer the questions below.

Average Monthly Rainfall (in inches)	
Month	Rainfall (inches)
April	3
May	2
June	4
July	5
August	6



1. What trend do you see in rainfall for June through August?

2. If this trend continues, how many inches of rain would you expect during September?

3. During which month did rainfall decrease from the previous month?

## Make a Line Graph Skill 5 - 8G

**2.**

1. Use the data in the table to make a line graph.

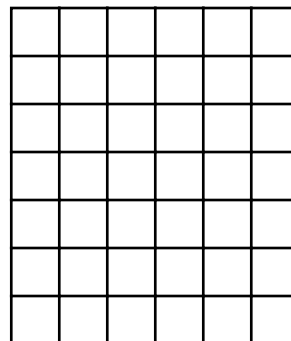
2. Write the title along the top of the grid.

3. Write a scale using the appropriate interval along the left side (vertical axis) of the grid. Label the scale.

4. List each month along the bottom of the graph (horizontal axis) and label this section.

5. Use the data in the table to plot each point and connect the points with lines.

Apple Pie Sales	
Day	Number Sold
Monday	1
Tuesday	7
Wednesday	5
Thursday	3
Friday	5
Saturday	6

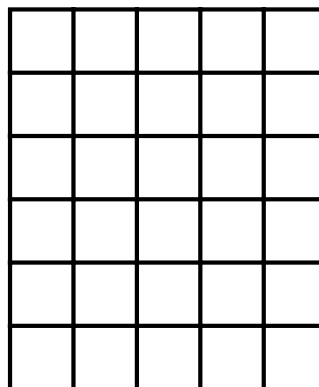


1. What trend do you see for apple pie sales for Tuesday through Thursday?

2. Between what days did sale increase by 6 pies?

**3.** Use the data in the table to make a line graph. Follow the instructions above. After the graph is complete, use the graph to answer the questions below.

Laps Gary Swam	
Week	Number of Laps
1	10
2	50
3	60
4	30
5	20



1. What trends can you see from the line graph?

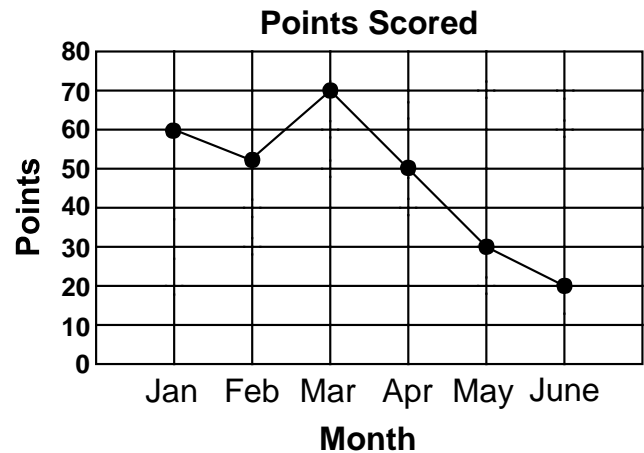
2. What interval did you choose for your scale and why?

3. How many more laps did Gary swim during week 3 than during week 4?

## Make a Line Graph Skill 5 - 8G

### Example: Scale and Interval

Points Scored	
Month	Points
January	60
February	52
March	70
April	50
May	30
June	20



Look at the data in the table above. The data range from 20 points to 70 points. So, we use a scale of 0 – 80 on the graph above. (or you could use a scale of 0 – 70)

An interval of 10 was chosen for the scale. This is the most appropriate interval for the data because most of the scores are separated by tens.

4. Use the table and the graph below to answer the questions.

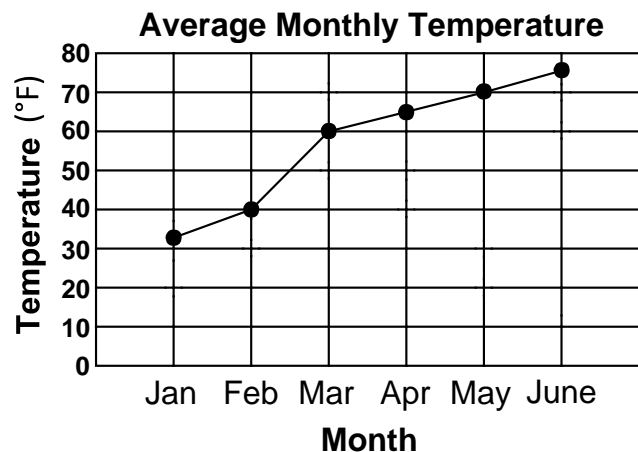
1. What is the lowest number in the data and the greatest? \_\_\_\_\_  
This information will help you to determine the best scale to use.

2. What is the interval is used in the line graph? \_\_\_\_\_

3. Could the line graph below have a break in the scale? \_\_\_\_\_

4. If you answered “yes” explain why there could be a break in the scale. \_\_\_\_\_

Average Monthly Temperature	
Month	Temperature
January	32
February	40
March	60
April	65
May	70
June	77

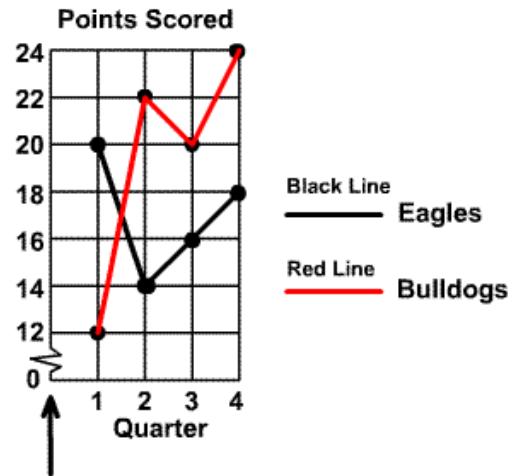


## Make a Line Graph Skill 5 - 8G

### Example: Double Line Graph

Basketball Points Scored				
Quarter	1	2	3	4
Eagles	20	14	16	18
Bulldogs	12	22	20	24

The data (look at table) range from 12 points to 24 points. So the scale of 0-24 was used. An interval of 2 is the most appropriate to use for this data.



This break in the scale shows that there is no data before the number 12.

Look at the double line graph above. If your practice sheet is printed without color the line that appears lighter in color is a red line.

To make a double line graph, you would look at the data in the table and simply plot the points on a grid for the first set of data and connect the points with a colored line.

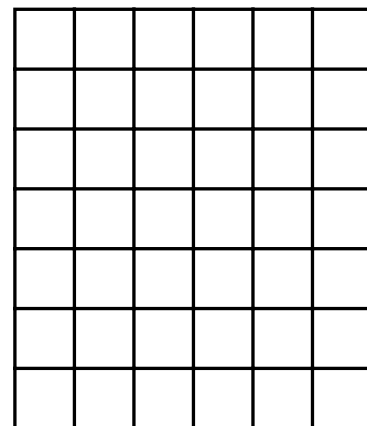
Repeat the process for the second set of data using a different colored line.

Make a legend like the one to the right of the double line graph. You do not have to write the color of the line in the legend (this is done in case your sheet is not in color). The color of the line used in the legend should match the color of the line in the graph.

Use the data in the table below to make a double line graph.

**5.**

Manatees Sighted					
Day	Mon	Tue	Wed	Thu	Fri
Team 1	4	2	8	10	14
Team 2	8	12	14	6	2



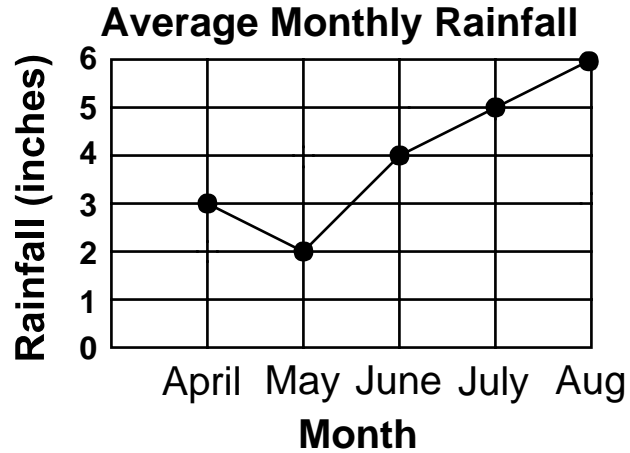
Look at the least and greatest numbers in the data to help you determine the scale.

You can use an interval on the scale greater than one. Look at the separation between each number.

1.

### Answer Key for Skill 5 - 8G

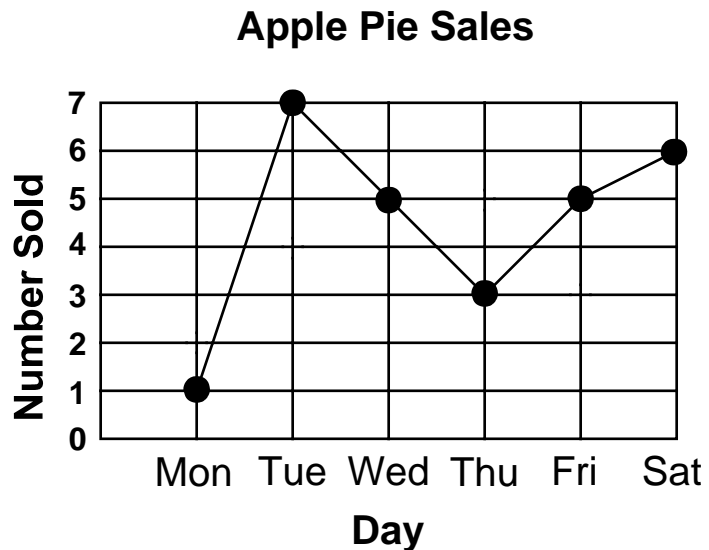
Average Monthly Rainfall (in inches)	
Month	Rainfall (inches)
April	3
May	2
June	4
July	5
August	6



1. What trend do you see in rainfall for June through August? Rainfall is increasing.
2. If this trend continues, how many inches of rain would you expect during September? 7 inches
3. During which month did rainfall decrease from the previous month? May

2.

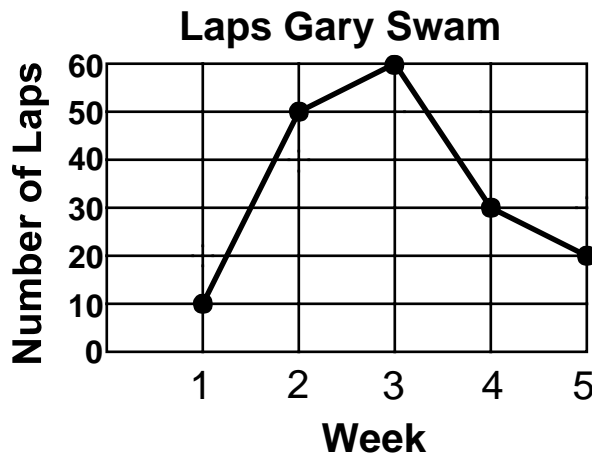
Apple Pie Sales	
Day	Number Sold
Monday	1
Tuesday	7
Wednesday	5
Thursday	3
Friday	5
Saturday	6



1. What trend do you see for apple pie sales for Tuesday through Thursday? Sales are decreasing.
2. Which day did sale increase from the previous day by 6 pies? Tuesday

3.

Laps Gary Swam	
Week	Number of Laps
1	10
2	50
3	60
4	30
5	20

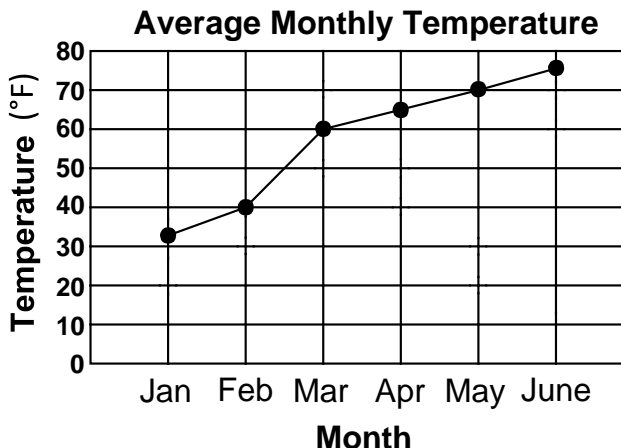


1. What trends can you see from the line graph? During weeks 1 – 3 the laps swam increased.
2. What interval did you choose for your scale and why? Interval of 10 because the data is separated by tens.
3. How many more laps did Gary swim during week 3 than during week 4? 30 laps.

4.

Answers to Grade 5, Skill 8G

Average Monthly Temperature	
Month	Temperature
January	32
February	40
March	60
April	65
May	70
June	77



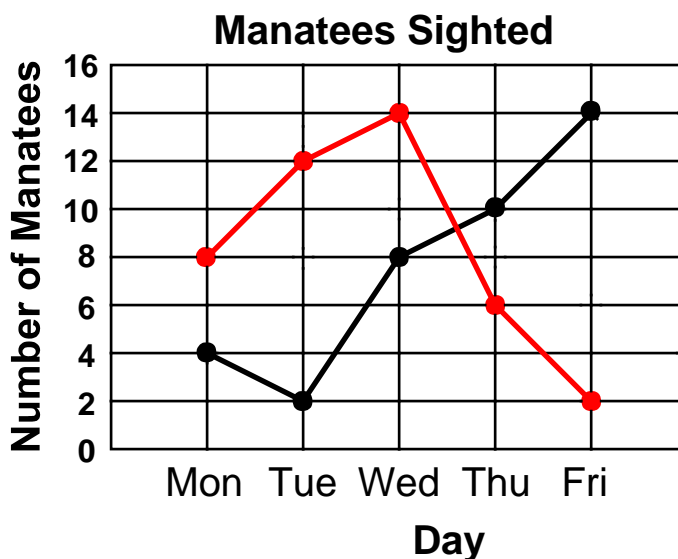
1. What is the lowest number in the data and the greatest? 32 - 77  
This information will help you to determine the best scale to use.
2. What is the interval is used in the line graph? 10
3. Could the line graph below have a break in the scale? yes
4. If you answered “yes” explain why there could be a break in the scale. There is no data between 0 and 30.

5.

Manatees Sighted					
Day	Mon	Tue	Wed	Thu	Fri
Team 1	4	2	8	10	14
Team 2	8	12	14	6	2

The data in the table ranges from 2 – 16, so the scale is made from 0 – 16.

The interval of 2 on the scale seems to be the most reasonable since the data is separated by 2's.



**Black Line** Team 1  
**Red Line** Team 2

If this sheet is printed without color, the red line appears lighter in color. In the legend there is no need for you to write “black line” or “red line”. This was done for this answer sheet in case your sheet is not printed in color. You would, however, make your lines in the legend the same color as the corresponding lines in the graph.