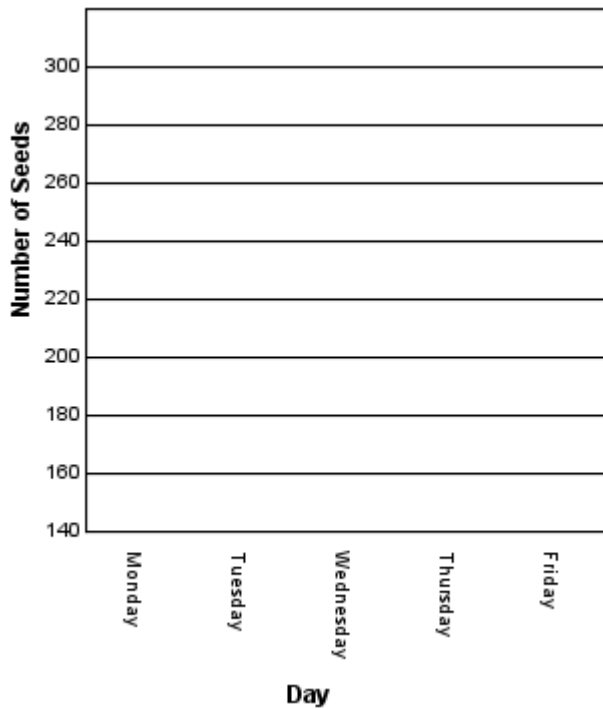


# Graph Interpretation #1

Complete.

## 1. Number of Seeds Planted



## Number of Seeds Planted

Day	Number of Seeds
Monday	280
Tuesday	270
Wednesday	180
Thursday	200
Friday	300

a. How many seeds were planted in all?

\_\_\_\_\_

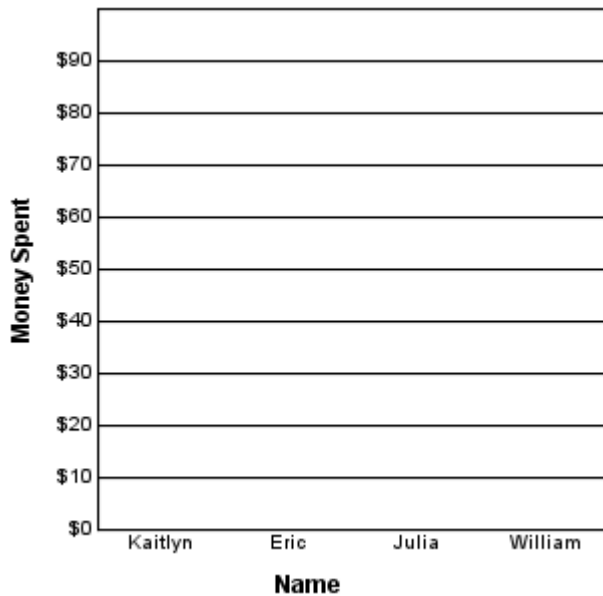
b. How many more seeds were planted on Friday than on Thursday?

\_\_\_\_\_

c. How many seeds were planted in all on Thursday and Wednesday?

\_\_\_\_\_

## 2. Money Spent on Sneakers



## Money Spent on Sneakers

Name	Money Spent
Julia	80
Kaitlyn	60
William	90
Eric	65

a. Who spent the least amount of money on sneakers?

\_\_\_\_\_

b. How much more was the most expensive sneakers than the least expensive one?

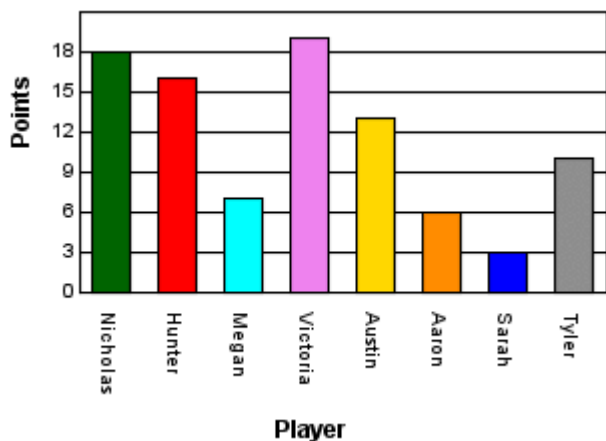
\_\_\_\_\_

c. How much did Kaitlyn and William spend altogether on their sneakers?

\_\_\_\_\_

3.

**Points Scored**



a. What are the total points for all five teams?

\_\_\_\_\_

b. Who scored the most points?

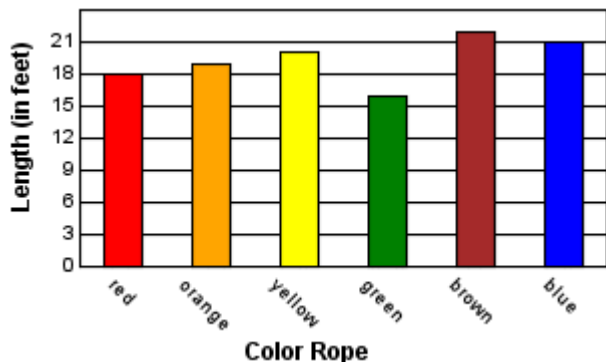
\_\_\_\_\_

c. Which player(s) scored more than 10 points?

\_\_\_\_\_

4.

**Length of Pieces of Rope**



a. Which piece of rope is 21 yards long?

\_\_\_\_\_

b. If it takes twenty-one inches of rope to go all the way around the fence post, how many times will the brown rope go around the post?

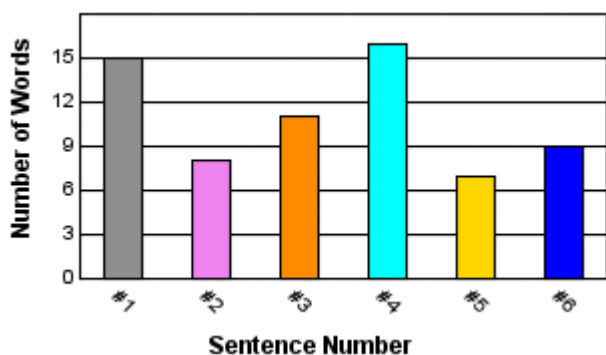
\_\_\_\_\_

c. Which piece or pieces of rope are more than 19 feet long but less than 21 feet long?

\_\_\_\_\_

5.

**Numbers of words in a paragraph**



a. How many more words did the longest sentence have than the shortest sentence?

\_\_\_\_\_

b. How many more words would have to be added to the paragraph to make it 91 words long?

\_\_\_\_\_

c. How many words were in the paragraph in all?

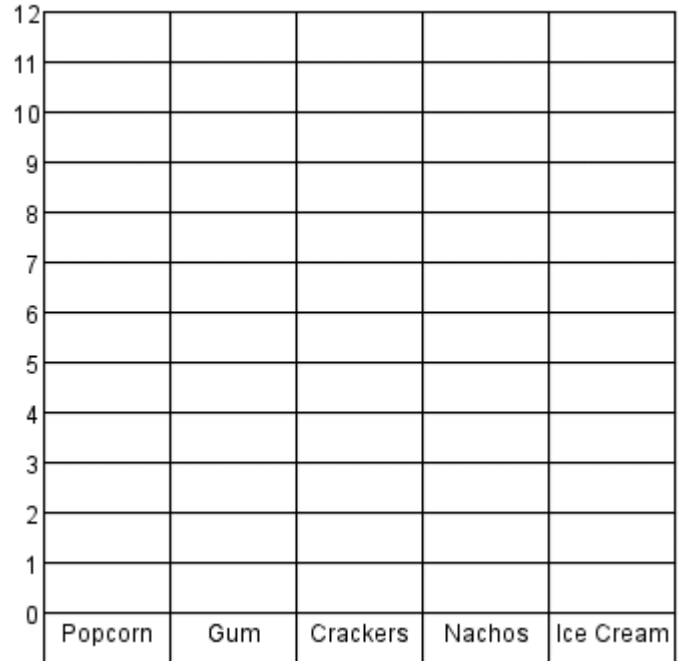
\_\_\_\_\_

1. Construct a bar graph from the tally below.

**Favorite Snack**

Snack	Number
Popcorn	II
Gum	IIII
Crackers	IIII IIII II
Nachos	IIII III
Ice Cream	IIII
Pretzels	IIII IIII

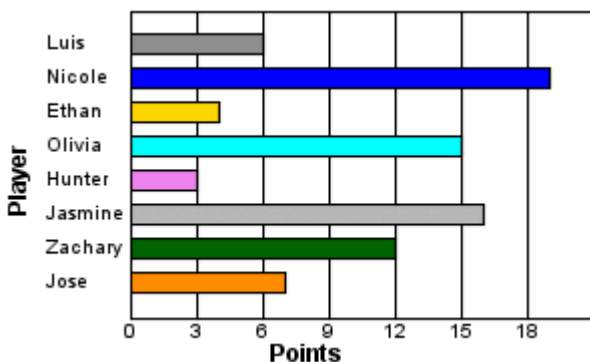
**Favorite Snack**



<p>A. What is the least popular snack?</p> <p>_____</p>	<p>B. How many fewer people chose popcorn than chose crackers?</p> <p>_____</p>
<p>C. How many people answered the survey?</p> <p>_____</p>	<p>D. If 8 more people chose popcorn how many total people would have chosen popcorn?</p> <p>_____</p>
<p>E. What is the most popular snack?</p> <p>_____</p>	<p>F. How many people chose either ice cream or nachos?</p> <p>_____</p>

2.

**Points Scored**



A. Which player(s) scored more than 6 points?

\_\_\_\_\_

B. Who scored the most points?

\_\_\_\_\_

C. What are the total points for all eight players?

\_\_\_\_\_

3. Make a horizontal bar graph using the data in the table.

### Number of cookies eaten

### Number of cookies eaten

Name	Cookies
Mrs. Anderson's class	42
Mrs. Johnson's class	60
Mr. Wilson's class	33
Miss Taylor's class	45
Mr. King's class	39
Mr. Jackson's class	54

A. How many classes ate more than 36 cookies?

---

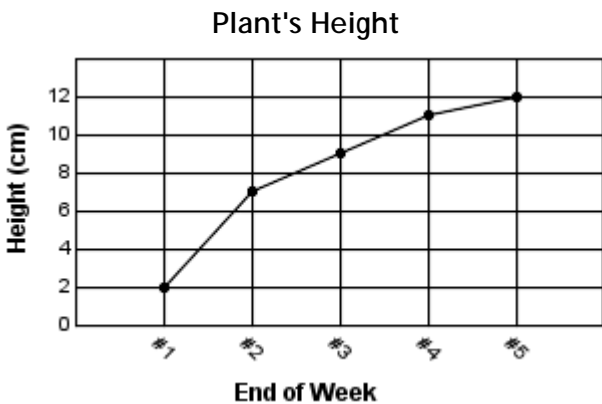
B. How many fewer cookies did Mr. Wilson's class eat than Mr. King's class?

---

C. If each student in Mr. Jackson's class ate exactly 3 cookies, how many students are in that class?

---

4.



A. Between which two weeks was there the greatest increase in height?

---

B. At the end of which week(s) was the plant no more than 12 centimeters tall?

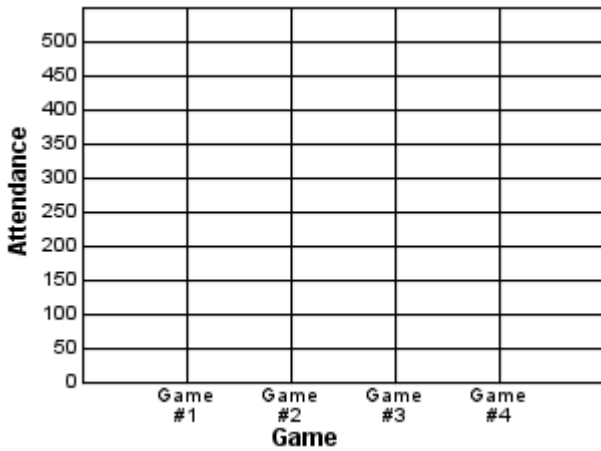
---

C. At the end of which week(s) was the plant taller than 7 centimeters?

---

5. Make a line graph using the data in the table.

Attendance



Attendance

Game	Attendance
Game #1	300
Game #2	500
Game #3	150
Game #4	475

A. Which games(s) did not have an attendance of at least 500 people?

---

B. How many more people came to game #4 than to game #3?

---

C. Which games(s) had an attendance of more than 300 people?

---

6.

Favorite Subject

Subject	Tally	Number
Mathematics		8
Writing		7
History		3
Science		2
Art		6
Music		5

A. List the subjects in order from the subject with the most votes to the subject with the fewest votes.

---

B. How many fewer people chose history than chose mathematics?

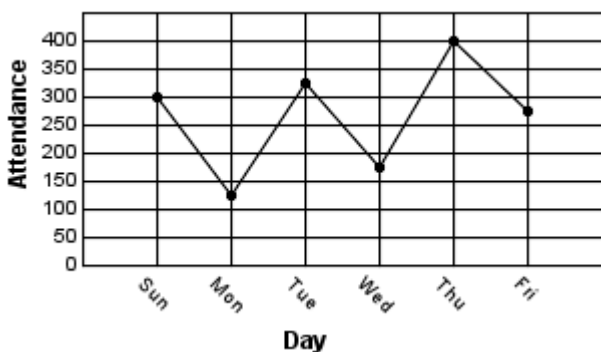
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C. How many more people chose mathematics than chose writing?

---

7.

School Play Attendance



A. Between which two days was there the greatest decrease in attendance?

---

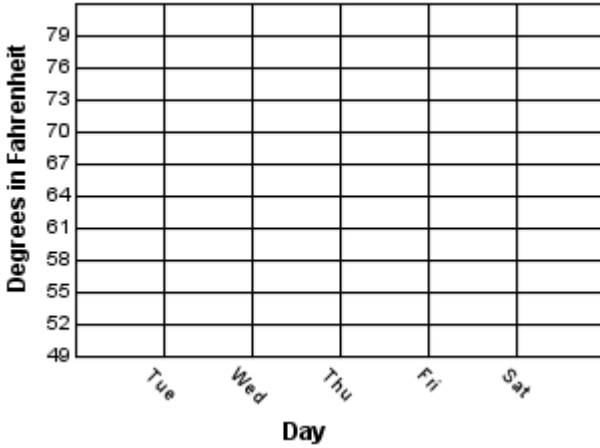
B. What was the total attendance for all of the play performances?

---

C. On which day(s) was the attendance less than 325 people?

8.

Temperature at 12:00 pm



Temperature at 12:00 pm

Day	Degrees in Fahrenheit
Tue	78
Wed	67
Thu	79
Fri	76
Sat	69

A. Between which two days was there the greatest decrease in temperature?

\_\_\_\_\_

B. What was the temperature at 12:00 pm on Friday?

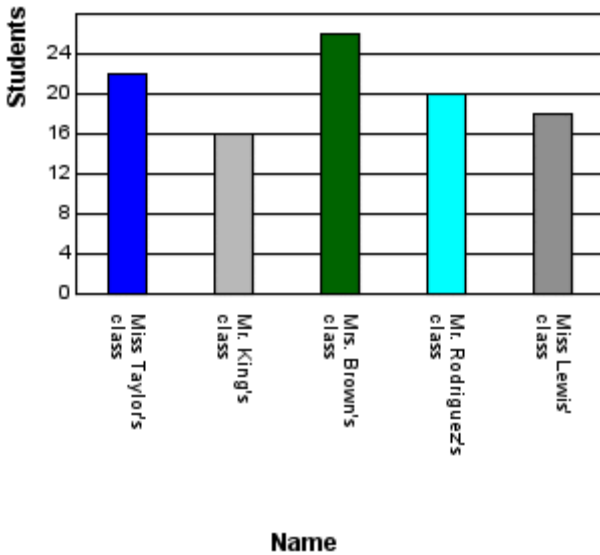
\_\_\_\_\_

C. Between which two days was there the greatest increase in temperature?

\_\_\_\_\_

9.

Number of students in each class



a. How many more students are in Mrs. Brown's class than are in Miss Taylor's class?

\_\_\_\_\_

b. Which class has the fewest students?

\_\_\_\_\_

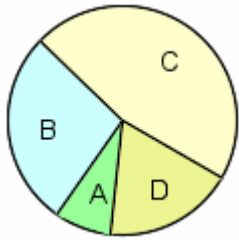
c. If half of the students in Mrs. Brown's class are girls, how many girls are in Mrs. Brown's class?

\_\_\_\_\_

**Math 11 Essentials Circle Graph Practice**

**Complete.**

**1. What Students Drank for Breakfast**

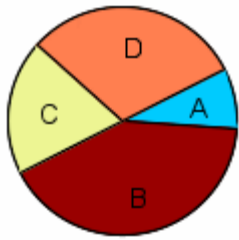


- A ■ Soda 9%
- B ■ Orange Juice 21%
- C ■ Water 23%
- D ■ Milk 47%

**a.** What fraction of the students drank water for breakfast?

**b.** If the school has 69 students, how many students drank water for breakfast?

**2. What Students Drank for Breakfast**

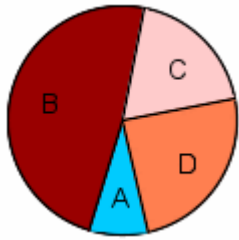


- A ■ Milk 43%
- B ■ Water 29%
- C ■ Orange Juice 20%
- D ■ Soda 8%

**a.** What is the most popular drink?

**b.** If the school has 62 students, how many students drank water for breakfast?

**3. What Students Drank for Breakfast**

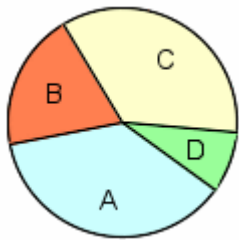


- A ■ Soda 8%
- B ■ Water 23%
- C ■ Milk 49%
- D ■ Orange Juice 20%

**a.** If the school has 98 students, how many students drank soda for breakfast?

**b.** What fraction of the students drank milk for breakfast?

**4. What Students Drank for Breakfast**

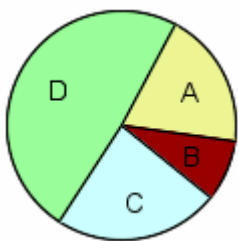


- A ■ Soda 8%
- B ■ Milk 40%
- C ■ Orange Juice 26%
- D ■ Water 26%

**a.** What is the most popular drink?

**b.** What fraction of the students drank milk for breakfast?

**5. What Students Drank for Breakfast**



- A ■ Soda 9%
- B ■ Orange Juice 16%
- C ■ Water 41%
- D ■ Milk 34%

**a.** What is the most popular drink?

**b.** What fraction of the students drank soda for breakfast?

Write each fraction, decimal, or ratio as a percent.

1. $\frac{93}{100}$	2. 26:100	3. 0.6	4. 12:100	5. 0.06
6. $\frac{38}{100}$	7. 0:100	8. 0.41	9. 0.74	10. $\frac{5}{100}$
11. 55:100	12. $\frac{89}{100}$	13. $\frac{77}{100}$	14. 30:100	15. 0.86
16. 0.02	17. $\frac{28}{100}$	18. 13:100	19. $\frac{94}{100}$	20. 7:100
21. 0.42	22. 65:100	23. 0.51	24. $\frac{100}{100}$	25. 0.04
26. $\frac{27}{100}$	27. 19:100	28. 0.09	29. $\frac{91}{100}$	30. 34:100
31. $\frac{57}{100}$	32. 0.46	33. $\frac{79}{100}$	34. 85:100	35. 62:100
36. 0.08	37. 20:100	38. $\frac{68}{100}$	39. $\frac{43}{100}$	40. 0.15
41. 0.01	42. 72:100	43. 57:100	44. 3:100	45. 0.91



## MATH 11 Essentials Pie Graph Assignment

Name: \_\_\_\_\_

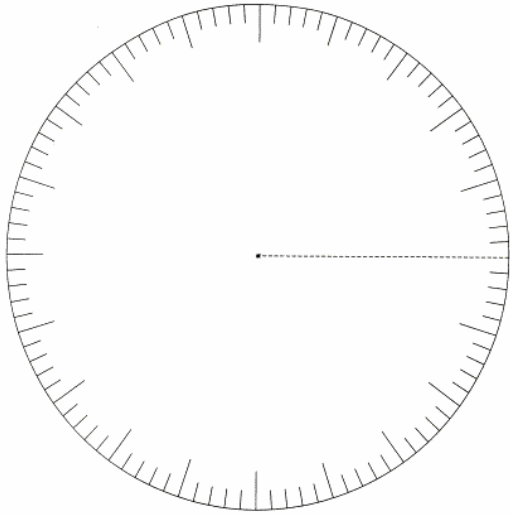
\* Answer these questions on the attached sheet.

1. In a survey, 25% of people said they prefer Tylenol, 50% preferred Advil, and the rest of the people preferred "other". Construct an accurate pie graph to display the data.
2. Of the people that chose Tylenol, 20% said they took it for headaches, 35% said they took it for back pain, 10% for cramps and the rest chose did not respond. Display the results in another pie graph.
3. 200 people were surveyed about junk food. 167 people said yes, they ate junk food regularly. 9 people said they never ate junk food. The remainder, 24 people, said "once in a while". Calculate the sample proportions for each answer and construct a pie graph.
4. A grade 11 math class took a census to determine the smoking habits of the group. Out of 32 students, 14 said they smoke, 13 said they didn't, and 5 chose not to answer. Calculate all sample percentages and make a pie graph to display the results.
5. 300 people were contacted by random survey using a telephone book. 135 people said they drank coffee every morning, 100 said they drink tea every morning, 50 said they drink coffee or tea every once in a while, and 15 said they never drink either coffee or tea. Calculate the sample proportions and make a pie graph.
6.
  - a) In a survey, 54% of respondents were male and 46% were female. Construct an accurate pie graph to display the gender proportions.
  - b) Are these the percentages you would expect? If not what would you expect?
  - c) What would you do to the sample size in order to get closer to the expected proportion?
7. 1100 grade one students were asked what their favourite color was. 248 children said "red", 53 said "pink", 220 said "blue", 198 said "green" and the rest chose "other".
  - a) How many children picked "other"?
  - b) Why was this number so large compared to all the others?
  - c) Why did so few children choose pink?
  - d) Calculate the sample proportions and make a pie graph.
8. In a survey among teachers, 42 out of 100 said they do "nothing" on the summer holiday. 34 teachers said they travelled, 10 said they worked, and the rest chose not to reply. Display the results in a pie graph.

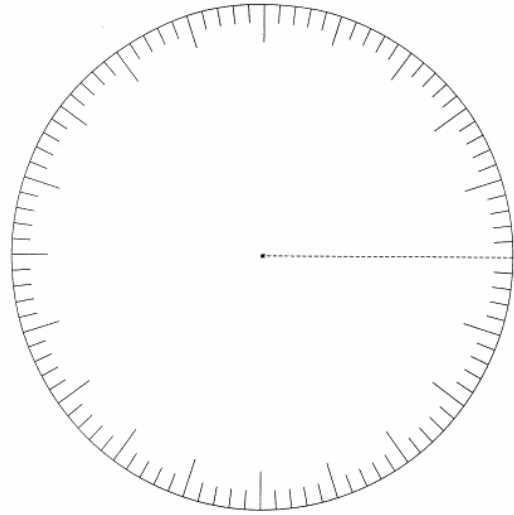
Pie Graph Assignment

Name: \_\_\_\_\_

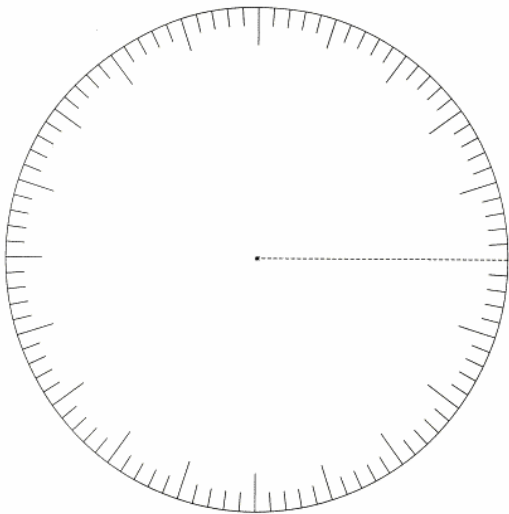
1. Title \_\_\_\_\_



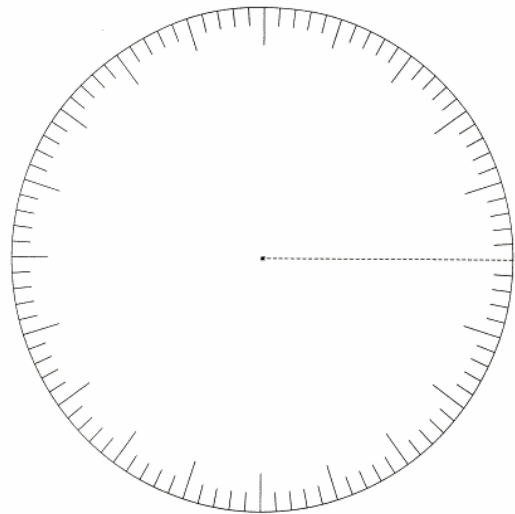
2. Title \_\_\_\_\_



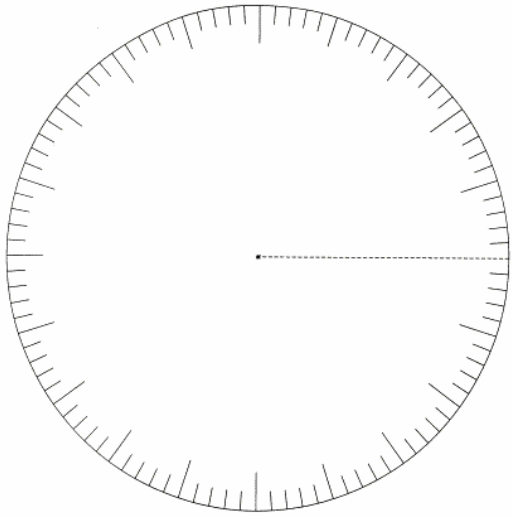
3. Title \_\_\_\_\_



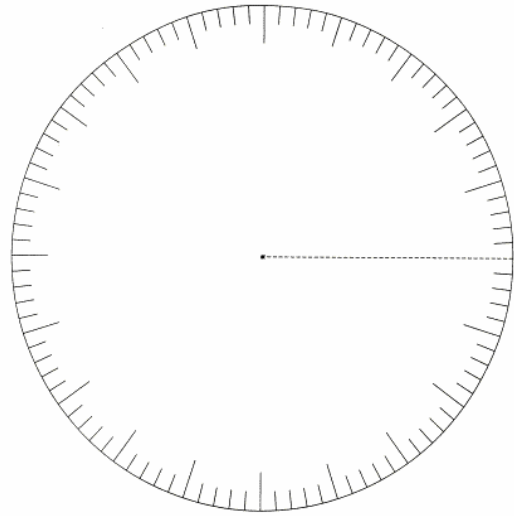
4. Title \_\_\_\_\_



5. Title \_\_\_\_\_



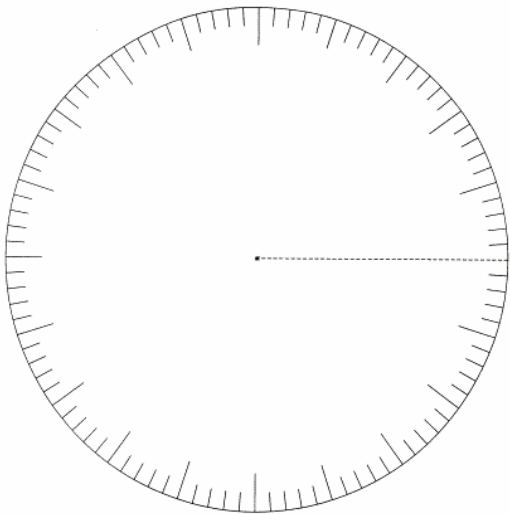
6. Title \_\_\_\_\_



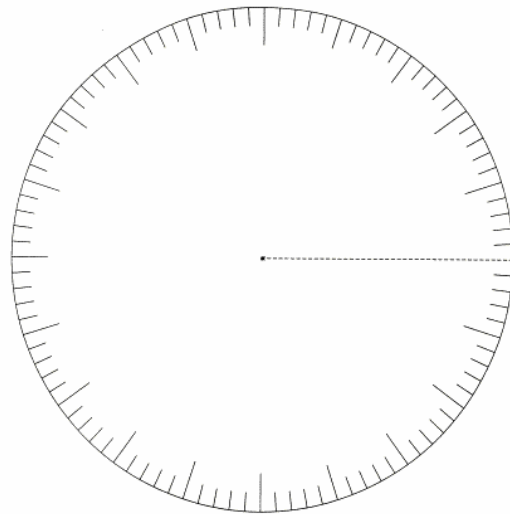
b) \_\_\_\_\_

c) \_\_\_\_\_

7. Title \_\_\_\_\_



8. Title \_\_\_\_\_



a) \_\_\_\_\_

b) \_\_\_\_\_

c) \_\_\_\_\_

## Math 11 Essentials Chapter Project #1

Title: Weather Data Management

Due Friday March 24<sup>th</sup>, 2006

- *The purpose of this assignment is to let you explore the process of collecting data and making graphs.*
- You will be required to record the temperature and weather conditions each day which will be written on the board each class. Having a complete chart will be part of your mark!
- You are also required to use your data to make at least **five** different charts or graphs. These graphs should also have a brief explanation.
- At least two of your graphs should be completed using technology.



**Math 11 Essentials**  
Chapter Project Assignment

Name \_\_\_\_\_

\* The following questions should be answered using the data you have collected for your chapter project on weather conditions.

1. Which day/s had the following,
  - a) highest temperature?
  - b) lowest temperature?
  - c) lowest wind-chill?
  - d) sunny weather conditions?
  - e) precipitation?
2. What percentage of days in your study had a precipitation record? What percentage did not have precipitation?
3. What was the total precipitation you recorded?
4. Create a pie chart that shows the percentage of different weather conditions (sunny, cloudy, etc.).
5. Create and label a pie chart that compares the number of days that the temperature was above  $0^{\circ}$  C and the number of days it was below  $0^{\circ}$  C
6. Create and label a line graph that shows the temperature for each day you recorded your data?
7. Create and label a line graph that shows the wind chill for each day you recorded your data?

**Math 11 Essentials**  
Chapter Project Assignment

Name \_\_\_\_\_

\* The following questions should be answered using the data you have collected for your chapter project on weather conditions.

1. Which day/s had the following,
  - a) highest temperature?
  - b) lowest temperature?
  - c) lowest wind-chill?
  - d) sunny weather conditions?
  - e) precipitation?
2. What percentage of days in your study had a precipitation record? What percentage did not have precipitation?
3. What was the total precipitation you recorded?
4. Create a pie chart that shows the percentage of different weather conditions (sunny, cloudy, etc.).
5. Create and label a pie chart that compares the number of days that the temperature was above  $0^{\circ}$  C and the number of days it was below  $0^{\circ}$  C
6. Create and label a line graph that shows the temperature for each day you recorded your data?
7. Create and label a line graph that shows the wind chill for each day you recorded your data?

**Math 11 Essentials Test #1 Data Management**

**Name** \_\_\_\_\_

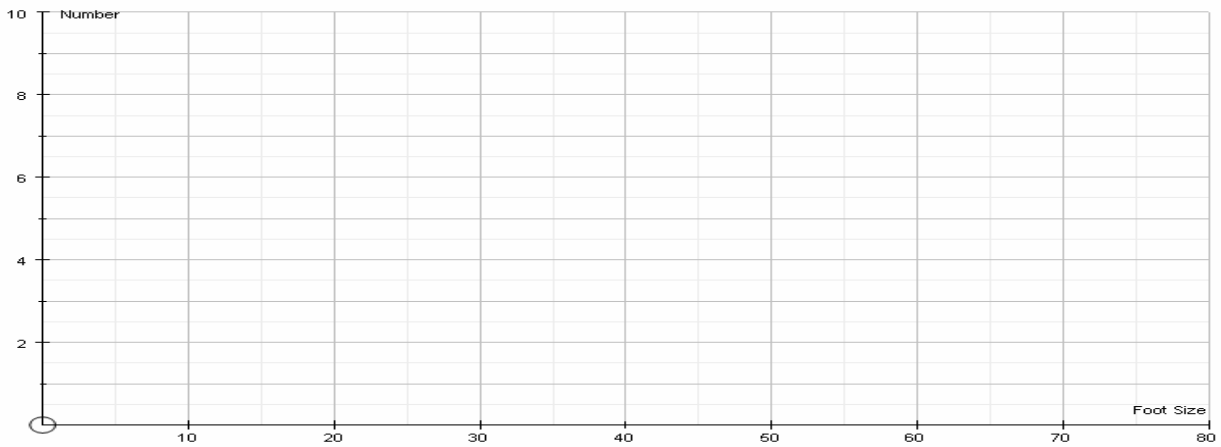
1. Katherine measured the feet of her classmates and the people in the class next door. Her data is listed. All measurements are in centimeters

40	42	47	36	30	48	51	62	29	44
52	58	54	28	36	31	30	45	64	28
39	38	35	41	47	45	29	30	55	71

- A) Complete the following chart. (2 pts)

<b>Foot Size (CM)</b>	<b>Number (#)</b>
0 – 9	
10 - 19	
20 – 29	
30 – 39	
40 – 49	
50 – 59	
60 – 69	
70 – 79	

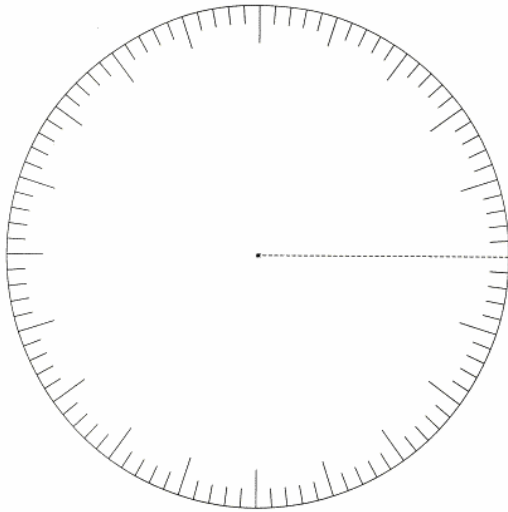
- B) Using your data in the table above construct a bar graph. (2 pts)



- C) How many people had feet that measured between 40 and 60 cm? (1pt)

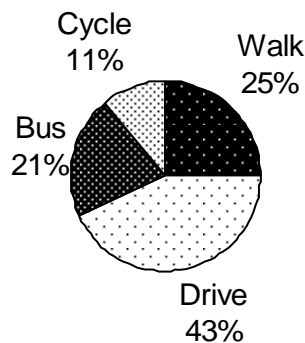


2. Last week at a local shopping centre people were asked which type of pet they owned. 38% said they had a dog, 42% said they had a cat, and 10% said they had an exotic pet. Construct and label a pie graph. (2 pts)



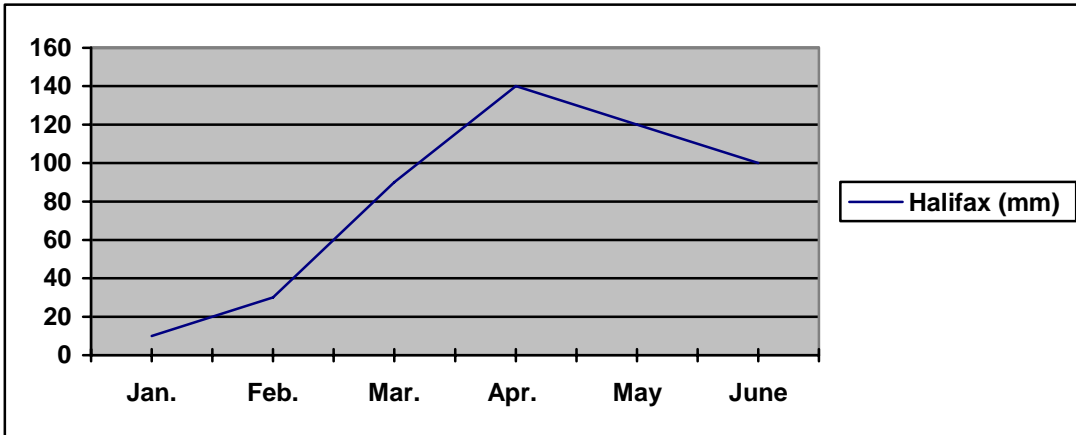
- A) Are you given all the information collected? What else could a person have answered? (1 pt)
- B) If 300 people were survey how many people owned exotic pets? (1 pt)

3. During a survey 200 people were asked how they got to work each day. There were four possible categories to choose from: walking, driving, taking a bus or cycling. There results are provided in the pie graph below.



- A) How much higher is the percentage of people who took the bus than the people who cycled? (1 pt)
- B) What percentage of people either drove or took the bus? (1 pt)
- C) How many people cycled to work? (1 pts)
- D) How many more people drove to work than walked? (2 pts)

4. The graph below shows how much rain fell in Halifax in the year of 2005.



A) How much rain fell in January and February combined? (1 pt)

B) Between which two months was there the greatest increase in rain fall? (1 pt)

C) Describe what happened to the rainfall between May and June. (1 pt)

5. A small orchard has 7 apple trees. The graph below show how many apples Andrea picked from each tree. How many apples did Andrea pick in total? (2 pts)

