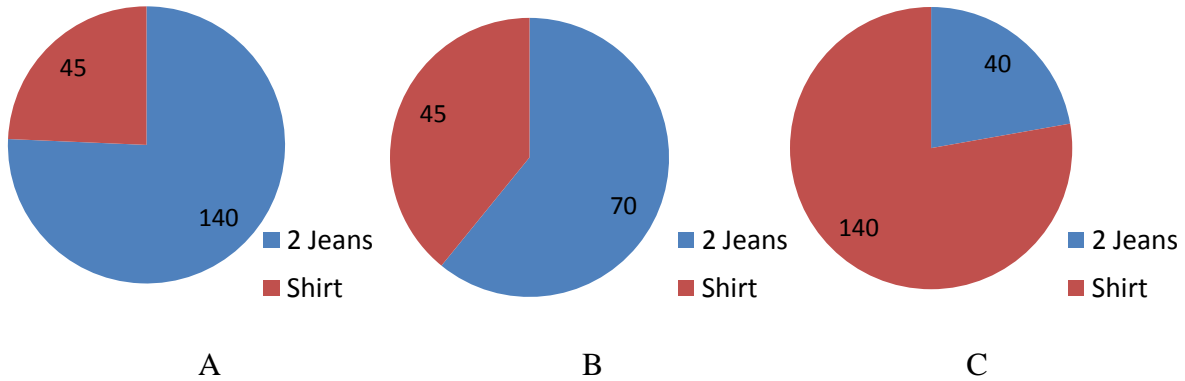
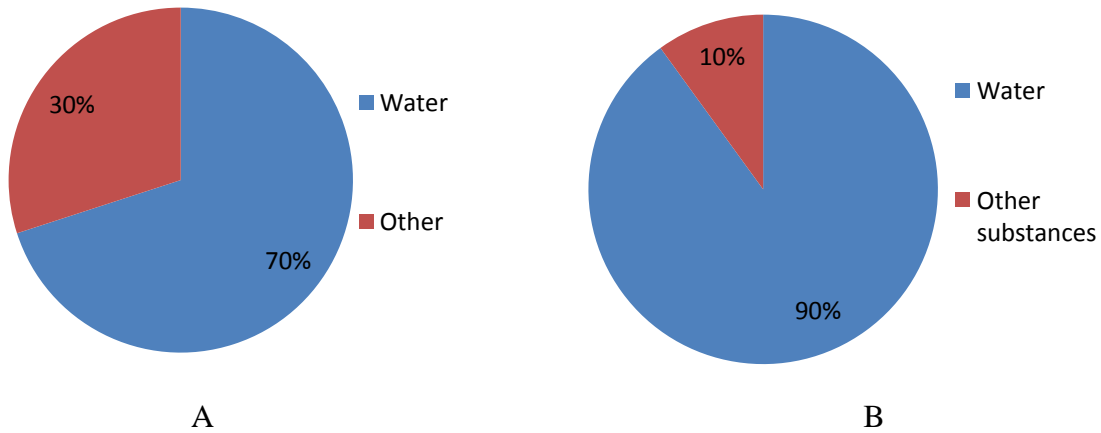


Q1. Samuel bought 2 Jeans for \$70 each and a t-shirt of \$45 each. Choose the best Circle diagram from the following.



Answer. _____

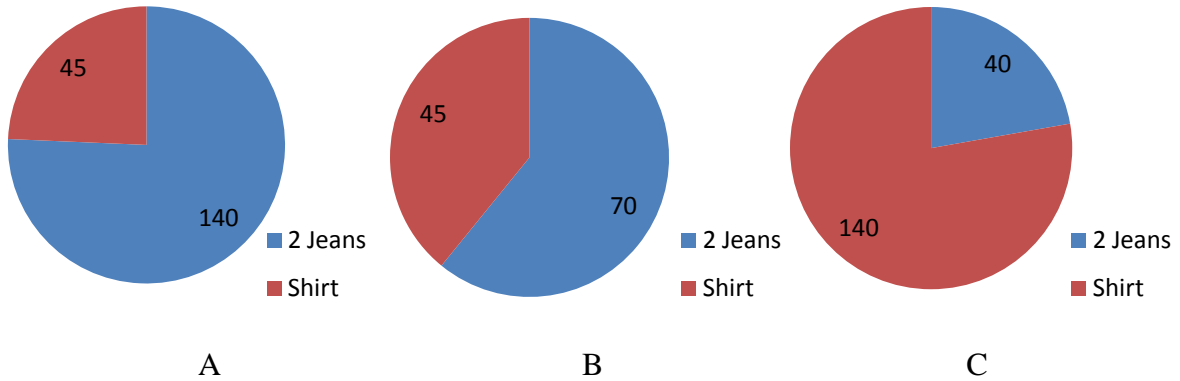
Q2: The Earth is composed approximately of 70% water and 30% land, while the human eye is 90% water and 10% composed of other substances. Choose the correct pie diagram for each.



Answer

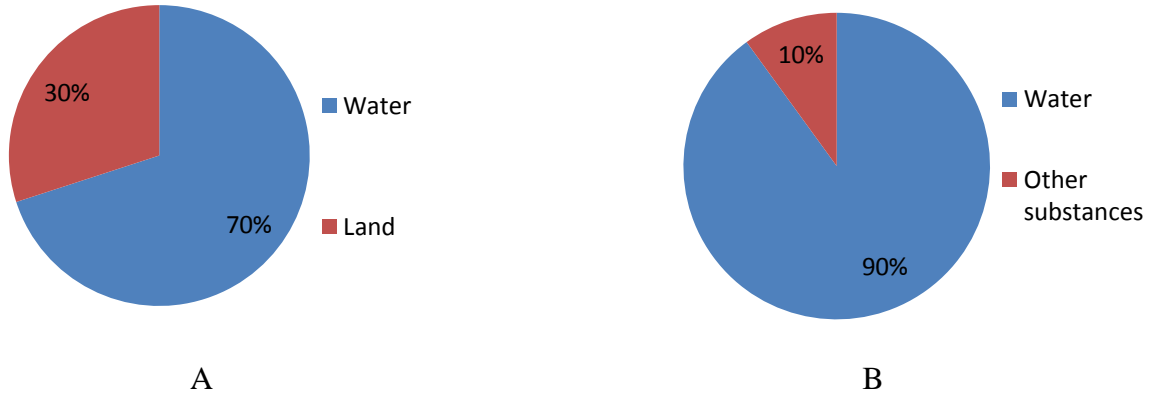
Body	Diagram
Eye	
Earth	

Q1. Samuel bought 2 Jeans for \$70 each and a t-shirt of \$45 each. Choose the best Circle diagram from the following.



Answer. A

Q2: The Earth is composed approximately of 70% water and 30% land, while the human eye is 90% water and 10% of other substances. Choose the correct pie diagram for each.



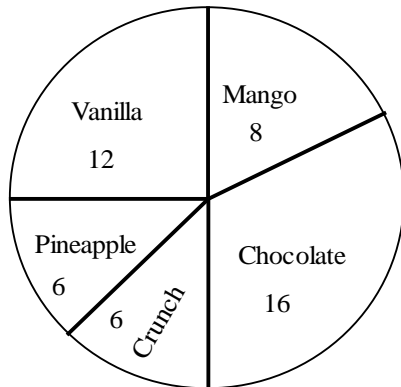
Answer

Body	Diagram
Eye	B
Earth	A

Circle and Bar Graphs

Name _____ Period _____ Date _____

1. A class took a survey on flavors of ice cream. Following is the circle graph of the data. Fill the answers to question in the table at the end.



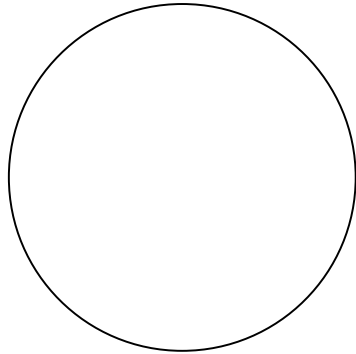
- a. What is the total number of votes?
- b. Find fraction of each part?
- c. Find percentage of each part?
- d. Find measure of each central angle in the graph?

Flavors	Votes	Fraction	Percentage	Degrees
Mango	8			
Chocolate	16			
Crunch	6			
Vanilla	12			
Pineapple	6			
Total				

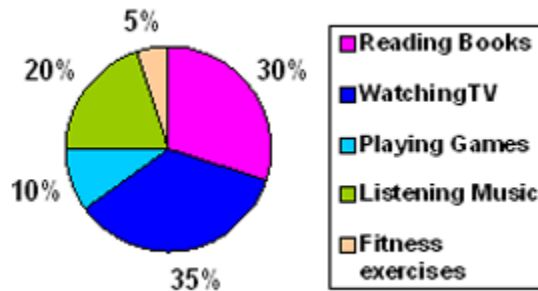
2. Find the measure of central angle which is represented by the following fractions or percentages
- a. 40% _____
 - b. $\frac{1}{5}$ _____
 - c. $\frac{1}{2}$ _____
 - d. 5% _____
 - e. 30% _____

3. Display data in table in circle graph

Item	Amount
Rent	80\$
Food	60\$
Clothes	20\$
Gas	50\$



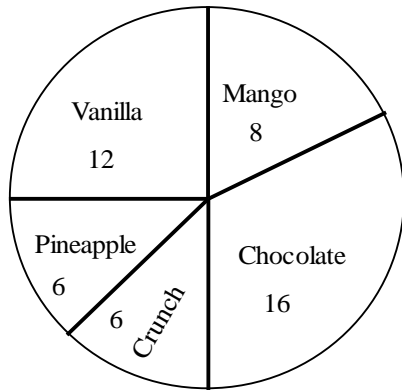
4. A survey was done on the activities of children in order to find their favorite activities. The following graph shows the survey data.



- Which is the most favorite activity of the students?
- Which is the least favorite activity of the students?

Name _____ **ANSWER KEY** _____ Period _____ Date _____

1. A class took a survey on flavors of ice cream. Following is the circle graph of the data. Fill the answers to question in the table at the end.



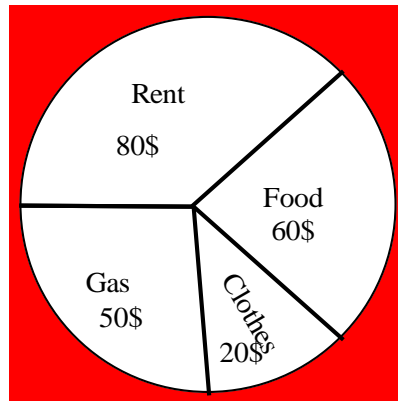
- What is the total number of votes?
- Find fraction of each part?
- Find percentage of each part?
- Find measure of each central angle in the graph?

Flavors	Votes	Fraction	Percentage	Degrees
Mango	8	$\frac{1}{6}$	16.66	60
Chocolate	16	$\frac{1}{3}$	33.33	120
Crunch	6	$\frac{1}{8}$	12.5	45
Vanilla	12	$\frac{1}{4}$	25	90
Pineapple	6	$\frac{1}{8}$	12.5	45
Total	48			

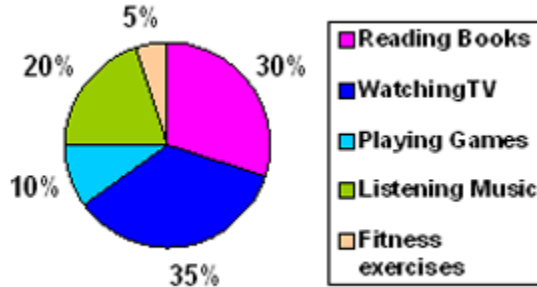
2. Find the measure of central angle which is represented by the following fractions or percentages
- 40% **144**
 - $\frac{1}{5}$ **72**
 - $\frac{1}{2}$ **180**
 - 5% **18**
 - 30% **108**

3. Display data in table in circle graph

Item	Amount
Rent	80\$
Food	60\$
Clothes	20\$
Gas	50\$



5. A survey was done on the activities of children in order to find their favorite activities. The following graph shows the survey data.



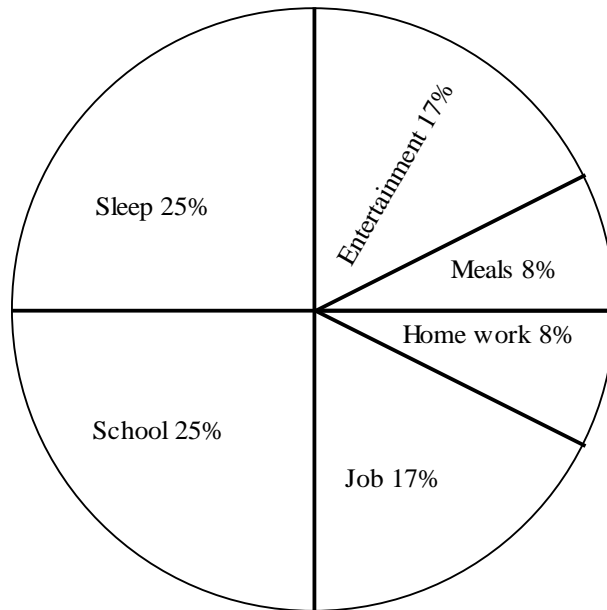
c. Which is the most favorite activity of the students? **Watching TV**

d. Which is the least favorite activity of the students? **Reading Books**

Circle and Bar Graphs

Name _____ Period _____ Date _____

1. Following is a graphical representation of activities done by people of a particular town



- a. These two activities took up half of the time of the day

Entertainment and School
Meals and School
Sleep and School

- b. These two activities took up least of the time

Sleep and School
Meals and Homework
Sleep and job

- c. Which of these took one fourth of the day

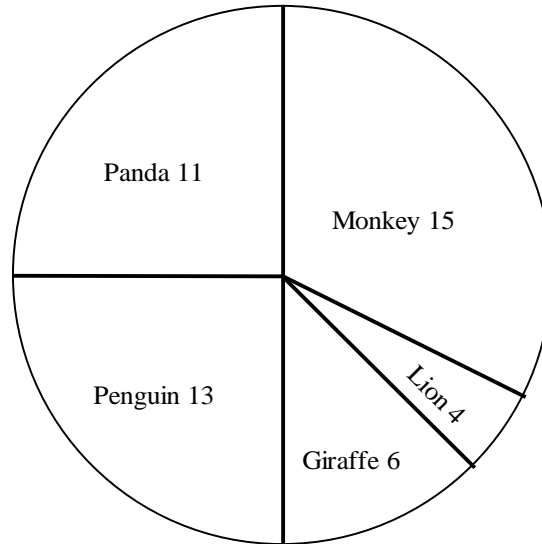
Entertainment
Sleep
Homework

d. What percent of day does homework take up

- 2
- 8
- 25

e. Which of these takes up the same amount of time as meals and entertainment together

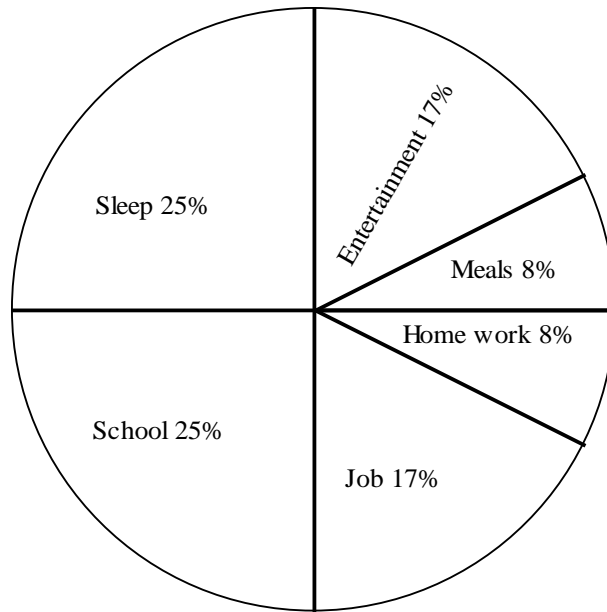
2. Students were asked their favorite animals at zoo, the pie chart presents the data



- a. How many students voted?
- b. Which is the most popular animal at zoo?
- c. What percentage of students voted for the Lion?
- d. What percentage voted for Panda?
- e. Which animal received the lowest number of votes?

Name ANSWER KEY Period _____ Date _____

Following is a graphical representation of activities done by people of a particular town



f. These two activities took up half of the time of the day

- Entertainment and School
- Meals and School
- Sleep and School

g. These two activities took up least of the time

- Sleep and School
- Meals and Homework
- Sleep and job

h. Which of these took one fourth of the day

- Entertainment
- Sleep
- Homework

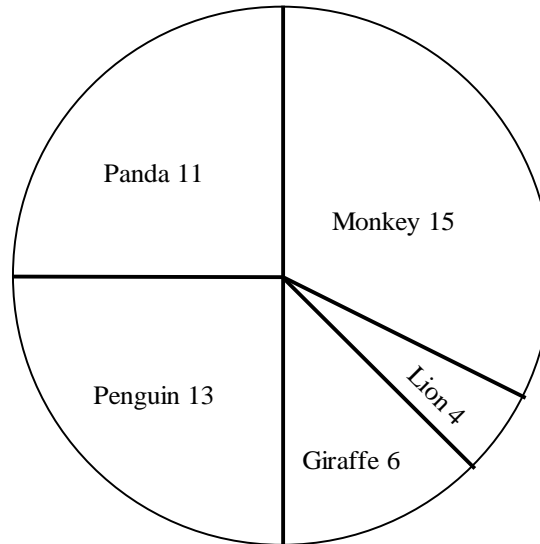
i. What percent of day does homework take up

- 2
- 8
- 25

j. Which takes up the same amount of time as meals and entertainment together

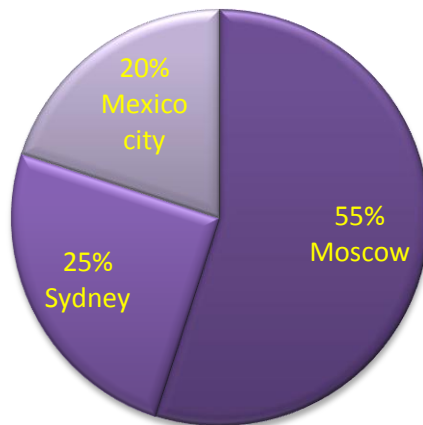
Sleep
School

2. Students were asked their favorite animals at zoo, the pie chart presents the data



- How many students voted? 49
- Which is the most popular animal at zoo? Monkey
- What percentage of students voted for the Lion? 8
- What percentage voted for Panda? 22
- Which animal received the lowest number of votes? Lion

Q1. Look at this circle graph:



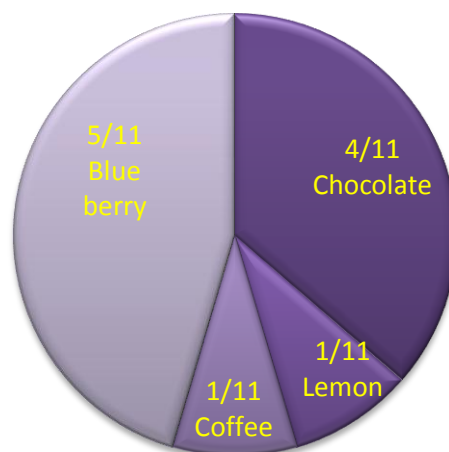
Which list is arranged from favorite city to least favorite city?

- A. Moscow, Sydney, Mexico City
- B. Moscow, Mexico City, Sydney
- C. Sydney, Mexico City, Moscow
- D. Sydney, Moscow, Mexico City

Answer _____

Q2. Look at this circle graph:

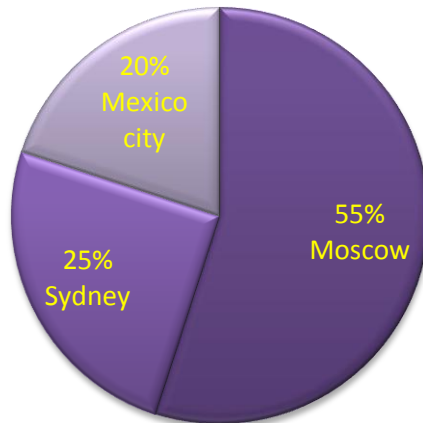
- A. chocolate
- B. coffee cake
- C. blueberry
- D. lemon



Which muffin received the most votes?

Answer _____

Q1. Look at this circle graph:



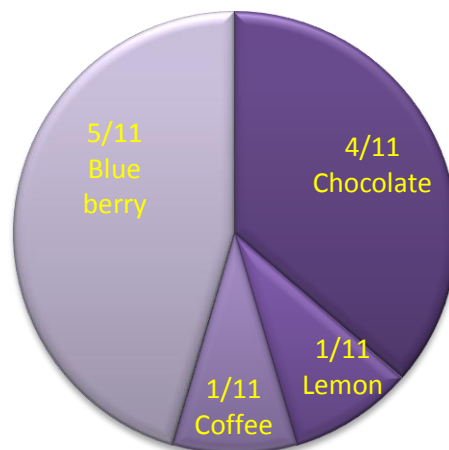
Which list is arranged from favorite city to least favorite city?

- A. Moscow, Sydney, Mexico City
- B. Moscow, Mexico City, Sydney
- C. Sydney, Mexico City, Moscow
- D. Sydney, Moscow, Mexico City

Answer A

Q2. Look at this circle graph:

- A. chocolate
- B. coffee cake
- C. blueberry
- D. lemon



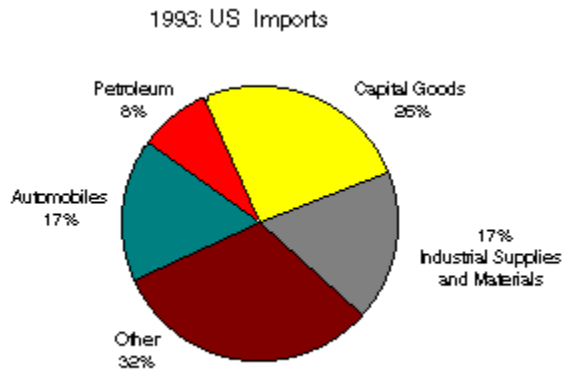
Which muffin received the most votes?

Answer C

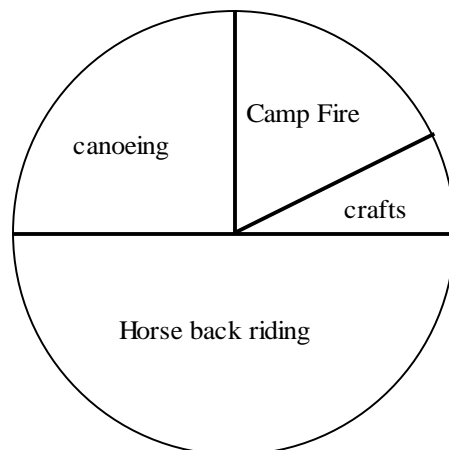
Circle and Bar Graphs

Name _____ Period _____ Date _____

1. Using the Circle Graph below answer questions

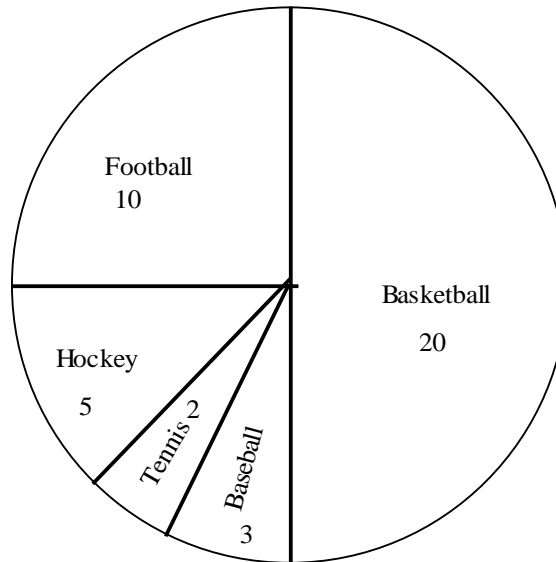


- a. What is ratio of Capital goods to petroleum?
- b. What portion makes about $\frac{1}{4}$ of the total imports?
- c. What percentage of total imports comprises of Industrial supplies, Petroleum and Capital goods?
2. At the end of summer camp a survey was done, the data is as follows



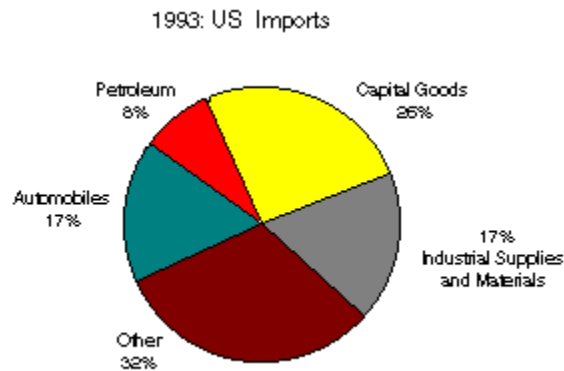
- a. What activity did campers enjoyed the most?
- b. What fraction of the campers chose canoeing as their favorite activity?
- c. What fraction chose horse riding as their favorite activity?
- d. Did more campers chose camp fires or crafts as their favorite activity
- e. Was camp fire or canoeing more popular with campers?

3. Following is a circle graph on a survey of sports



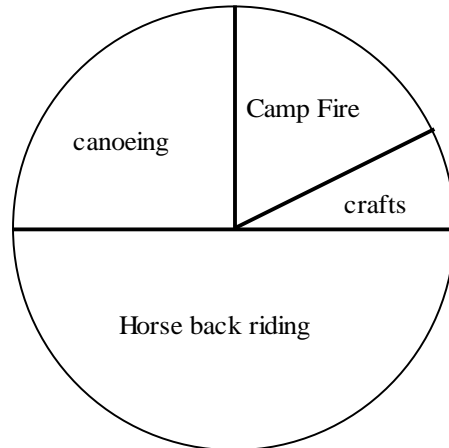
- What fraction of people ranked football as their favorite sport?
- What fraction said hockey was their favorite game?
- How many more people chose basketball than tennis?
- About half of people chose which sport?
- About one quarter people chose which sport as their favorite?
- What fraction chose baseball or tennis?
- What fraction chose football or basketball?
- Which is the least favorite activity of the students?

1. Using the Circle Graph below answer questions



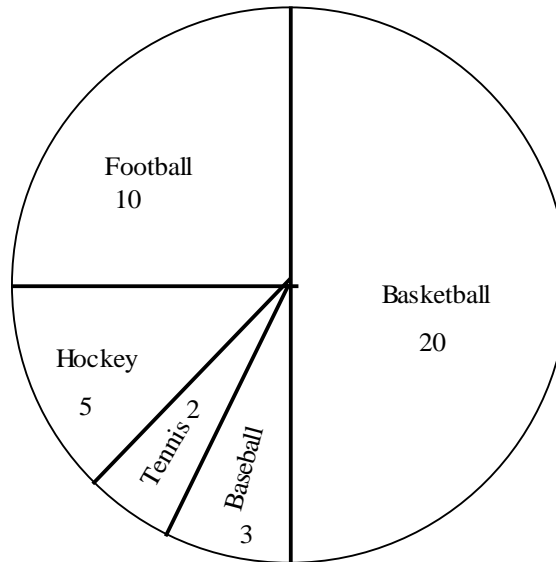
- What is ratio of Capital goods to petroleum? **3:1**
- What portion makes about $\frac{1}{4}$ of the total imports? **Capital Goods**
- What percentage of total imports comprises of Industrial supplies, Petroleum and Capital goods? **50**

2. At the end of summer camp a survey was done, the data is as follows



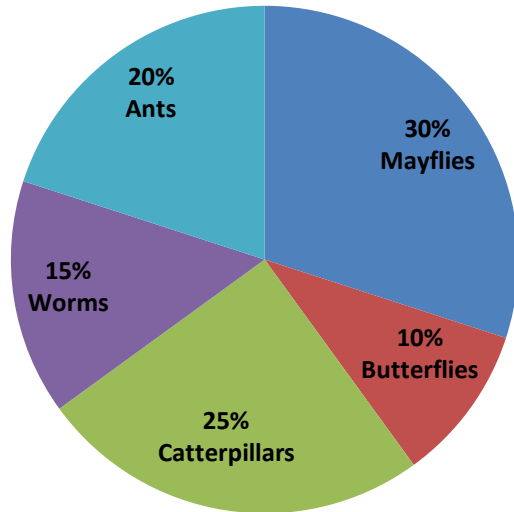
- What activity did campers enjoyed the most? **Horseback riding**
- What fraction of the campers chose canoeing as their favorite activity? **$\frac{1}{4}$**
- What fraction chose horse riding as their favorite activity? **$\frac{1}{2}$**
- Did more campers chose camp fires or crafts as their favorite activity? **Camp Fires**
- Was camp fire or canoeing more popular with campers? **canoeing**

3. Following is a circle graph on a survey of sports



- What fraction of people ranked football as their favorite sport? $\frac{1}{4}$
- What fraction said hockey was their favorite game? $\frac{1}{8}$
- How many more people chose basketball than tennis? 17
- About half of people chose which sport? **basketball**
- About one quarter people chose which sport as their favorite? **Football**
- What fraction chose baseball or tennis? $\frac{1}{8}$
- What fraction chose football or basketball? $\frac{3}{4}$
- Which is the least favorite activity of the students? **Tennis**

Look at this circle graph:



Q1. Which list is arranged from favorite insect to least favorite insect?

- A. Mayflies, worms, butterflies, ants, caterpillars
- B. Mayflies, worms, caterpillars, butterflies, ants
- C. Mayflies, butterflies, worms, ants, caterpillars
- D. Mayflies, caterpillars, ants, worms, butterflies

Answer _____

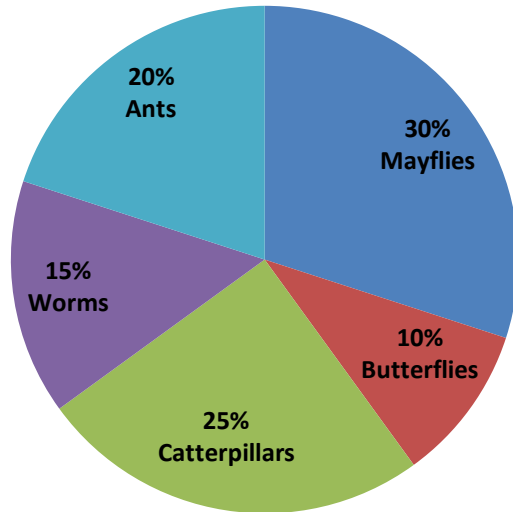
Q2. Together, which two insects account for 50%?

Answer _____

Q3. Determine the angle for worms?

Answer _____

Look at this circle graph:



Q1. Which list is arranged from favorite insect to least favorite insect?

- A. Mayflies, worms, butterflies, ants, caterpillars
- B. Mayflies, worms, caterpillars, butterflies, ants
- C. Mayflies, butterflies, worms, ants, caterpillars
- D. Mayflies, caterpillars, ants, worms, butterflies

Answer **D**

Q2. Together, which two insects account for 50%?

Answer **Ants and mayflies**

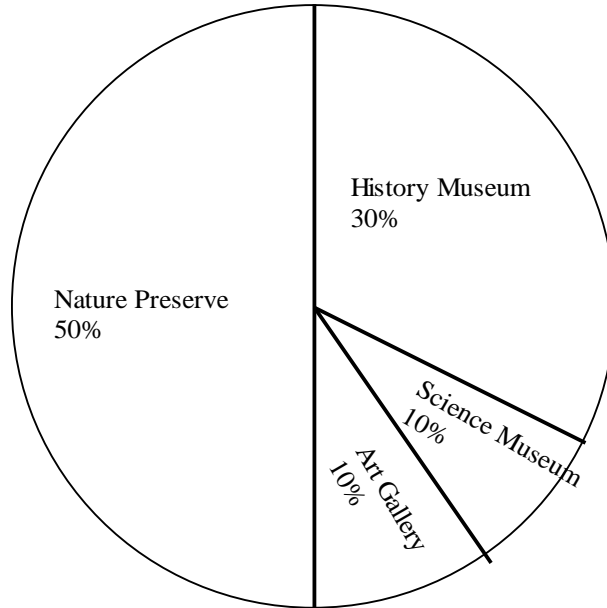
Q3. Determine the angle for worms?

Answer **54%**

Circle and Bar Graphs

Name _____ Period _____ Date _____

1. Mr. Sobieski asked his class to vote on where they would most like to go on a field trip. The choices he gave them were: history museum, science museum, art gallery, and nature preserve. All 30 students cast one vote each. The pie graph below shows the results.

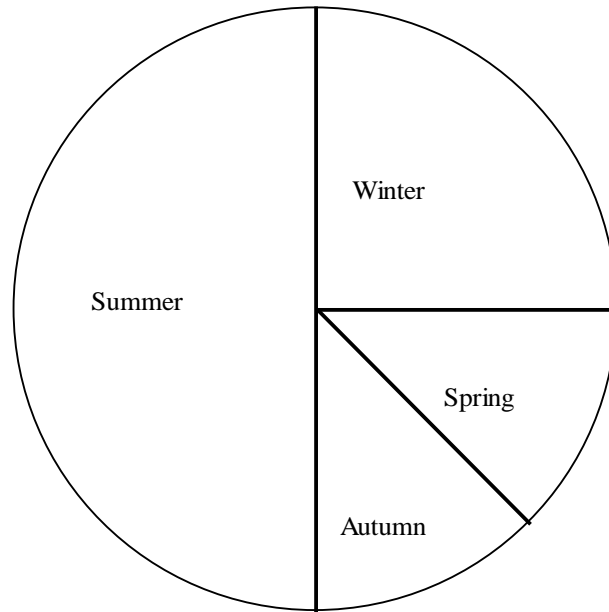


- a. Fill in the table below

Destination	Number of Votes
Nature Preserve	
History Museum	
Science Museum	
Art Gallery	

- b. How many more student chose history museum than science museum?
- c. How many students chose Nature preserve or art gallery?

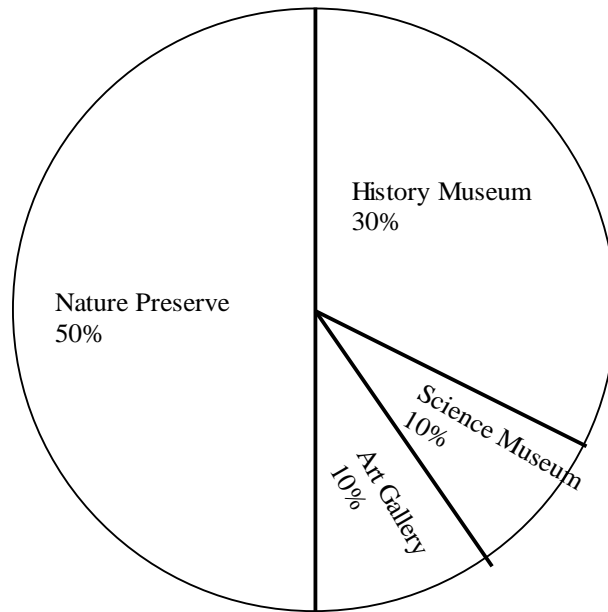
2. George asked his class mates about their favorite seasons, he made a circle graph of the results



- What percentage of George's class mates said winter was their favorite season?
- What percentage of George's class mates said summer was their favorite season?
- What fraction chose winter as their favorite season?
- What fraction chose spring as their favorite season?
- What percentage chose winter or summer as their favorite season?
- If George surveyed 20 class mates how many of them chose summer?
- If George surveyed 32 students how many chose autumn?

Name _____ ANSWER KEY _____ Period _____ Date _____

1. Mr. Sobieski asked his class to vote on where they would most like to go on a field trip. The choices he gave them were: history museum, science museum, art gallery, and nature preserve. All 30 students cast one vote each. The pie graph below shows the results.

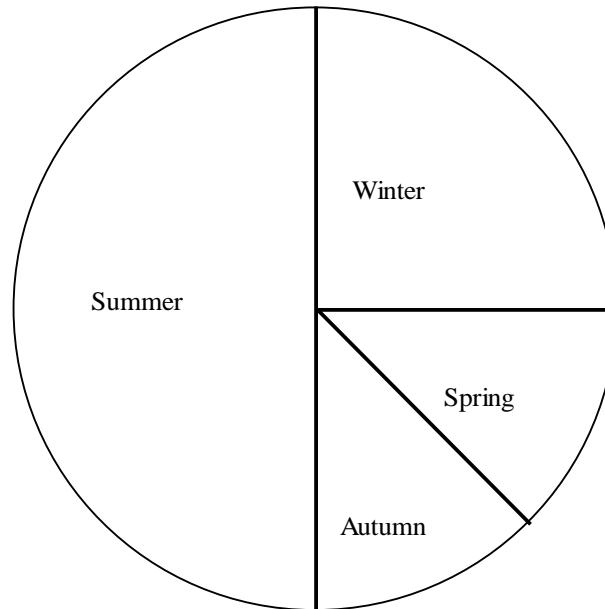


- a. Fill in the table below

Destination	Number of Votes
Nature Preserve	15
History Museum	9
Science Museum	3
Art Gallery	3

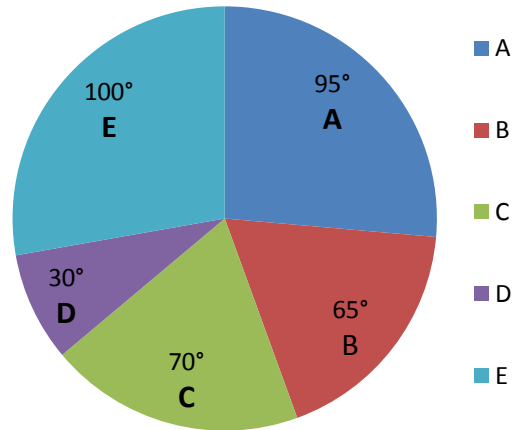
- b. How many more student chose history museum than science museum? **6**
- c. How many students chose Nature preserve or art gallery? **18**

2. George asked his class mates about their favorite seasons, he made a circle graph of the results



- a. What percentage of George's class mates said winter was their favorite season? **25**
- b. What percentage of George's class mates said summer was their favorite season? **50**
- c. What fraction chose winter as their favorite season? **$\frac{1}{4}$**
- d. What fraction chose spring as their favorite season? **$\frac{1}{8}$**
- e. What percentage chose winter or summer as their favorite season? **75**
- f. If George surveyed 20 class mates how many of them chose summer? **10**
- g. If George surveyed 32 students how many chose autumn? **4**

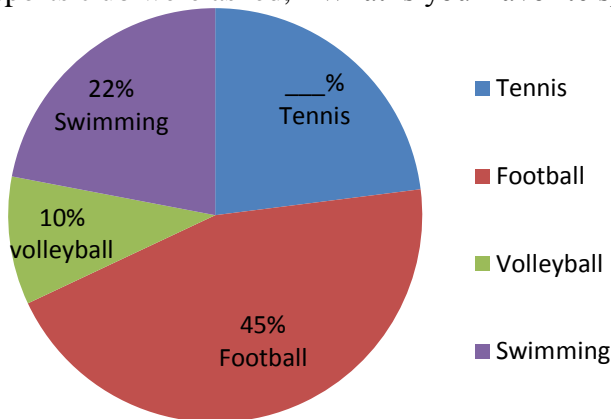
Q1. The circle diagram below shows the division of a circle with angles. Calculate percentage (in round figures) of each compartment in the circle.



Answer.

Compartment	A	B	C	D	E
Percentage					

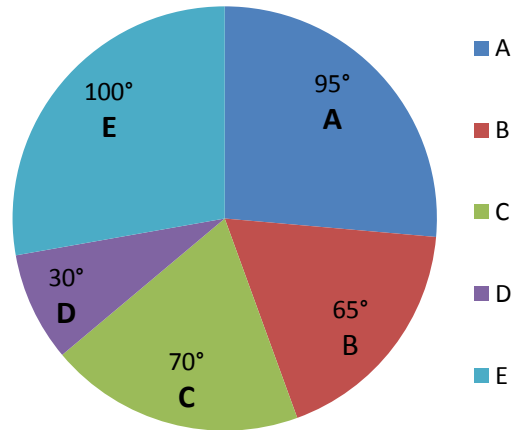
Q2. 400 members of a sports club were asked, “What is your favorite sport?”



The pie chart shows the results.

- a) What percentage chose tennis? Answer _____
- b) How many chose volleyball? Answer _____
- c) Calculate the angle for Tennis? Answer _____

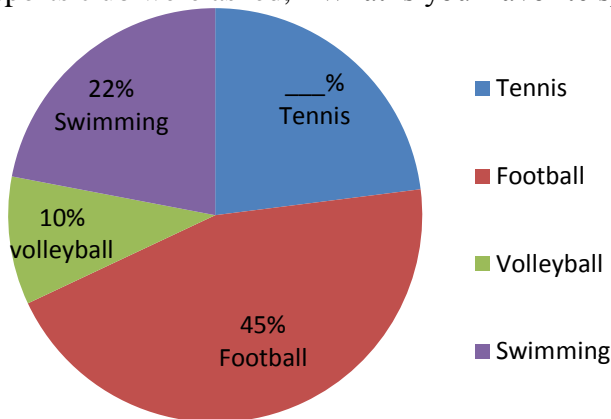
Q1. The circle diagram below shows the division of a circle with angles. Calculate percentage (in round figures) of each compartment in the circle.



Answer.

Compartment	A	B	C	D	E
Percentage	26	18	20	8	28

Q2. 400 members of a sports club were asked, “What is your favorite sport?”



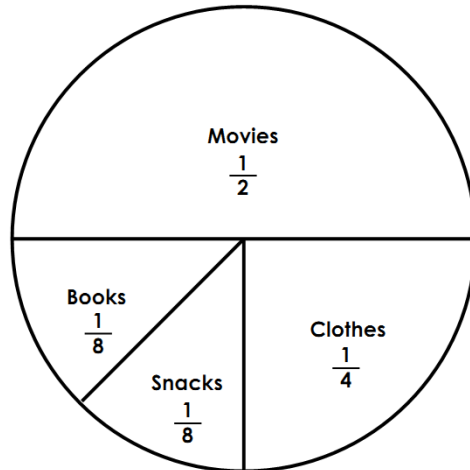
The pie chart shows the results.

- a) What percentage chose tennis? Answer 23%
- b) How many chose volleyball? Answer 92
- c) Calculate the angle for Tennis? Answer 83 (approx.)

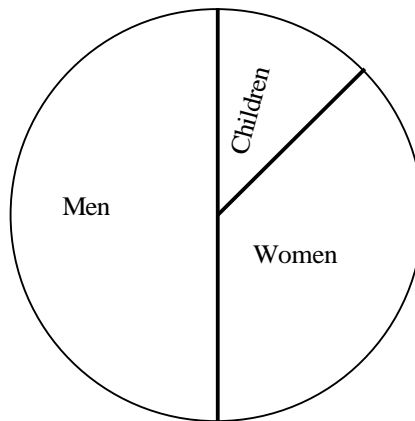
Answering questions about Circle Graphs

Name _____ Period _____ Date _____

1. Contessa had earned \$100 washing cars. She made a pie graph to show how she spent the money.



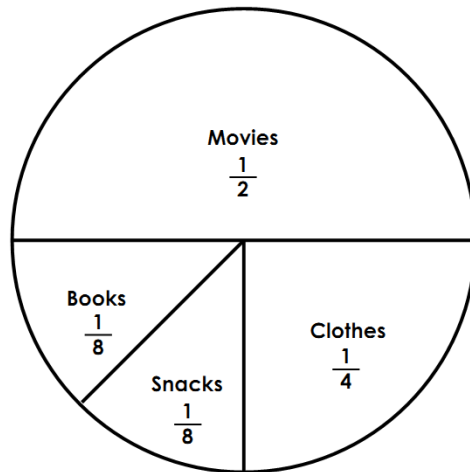
- a. How much money did Contessa spend at the movies?
 - b. How much money did she spend on clothes?
 - c. How much money did she spend on snacks?
 - d. What percentage of her money was spent at the movies?
 - e. What percentage of her money was spent on clothes?
2. George conducted a survey in a village in located south of Wisconsin and found that there were 100 literate people in the village.



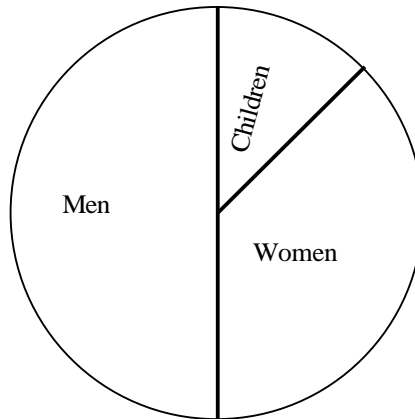
- a. What portion of the population are more educated Men or Women?
- b. What percentage of total literate people comprises of children?
- c. Are men more educated than women?
- d. What portion of literate people are men?
- e. The portion of literate children is what percentage of literate men?

Name _____ ANSWER KEY _____ Period _____ Date _____

1. Contessa had earned \$100 washing cars. She made a pie graph to show how she spent the money.



- a. How much money did Contessa spend at the movies? **\$50**
- b. How much money did she spend on clothes? **\$25**
- c. How much money did she spend on snacks? **\$12.5**
- d. What percentage of her money was spent at the movies? **50%**
- e. What percentage of her money was spent on clothes? **25%**
2. George conducted a survey in a village located south of Wisconsin and found that there were 100 literate people in the village.

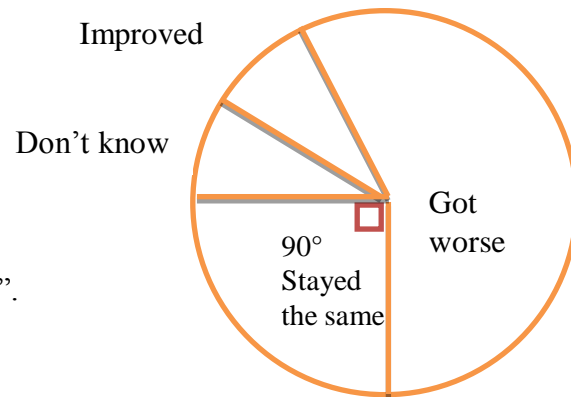


- a. What portion of the population are more educated Men or Women? **Men**
- b. What percentage of total literate people comprises of children? **25%**

- c. Are men more educated than women? **Yes**
- d. What portion of literate people are men? **Half**
- e. The portion of literate children is what percentage of literate men? **One fourth**

In a survey, parents were asked:

“Do you think the behaviour of children has improved in the last ten years?”



The pie chart shows the results.

Q1. 75 parents in the survey said “Don’t know”.

This was 5% of all parents.

Calculate the number of parents that took part in the survey.

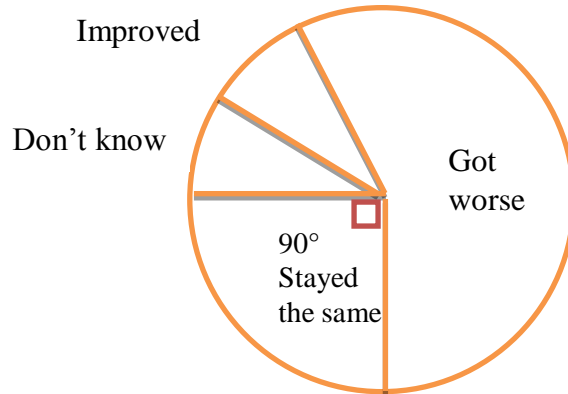
Answer

Q2. Estimate the fraction of parents who think that the behaviour of children has stayed the same.

Answer

In a survey, parents were asked:

“Do you think the behaviour of children has improved in the last ten years?”



The pie chart shows the results.

Q1. 75 parents in the survey said “Don't know”.

This was 5% of all parents.

Calculate the number of parents that took part in the survey

Answer1500

Q2. Estimate the fraction of parents who think that the behaviour of children has stayed the same

Answer375