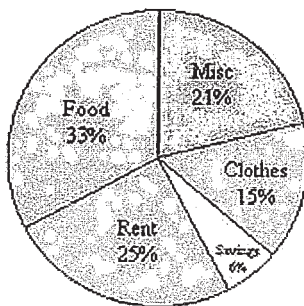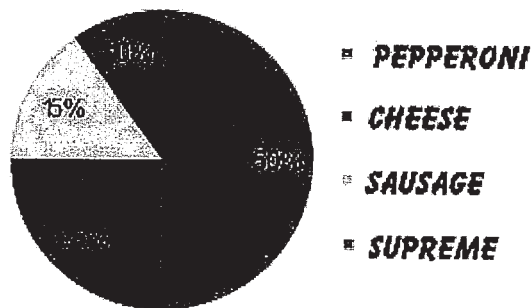To be able to interpret and represent data using circle graphs.

In a **circle graph**, or pie chart, data are represented as parts of a circle. This is most effective for looking at parts or percents of a whole.

Milton Family's Budget (Title)

FAVORITE PIZZA TOPPINGS

■ PEPPERONI

■ CHEESE

▫ SAUSAGE

▪ SUPREME

Making sure to pay close attention to keys, titles and percentages. Try to decipher what the graph is describing.

To represent information on a circle graph follow these steps:
- **Find the number of degrees for each section of the graph. There are 360 degrees in a circle. (Turn the percent into a decimal and multiply by 360)**
- **Draw a circle and radius.**
- **Then use a protractor to draw the first slice of pie measuring the first angle. Repeat for remaining sections.**
- **Label each section and give the graph a title.**
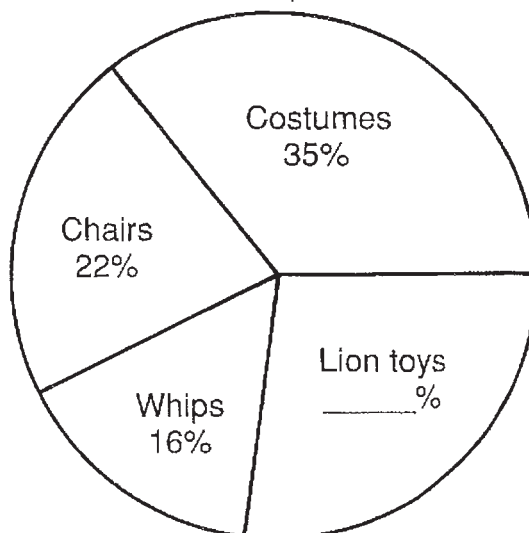
Circle graphs are used to compare parts of a whole.

What Should You Do for a Starving Cannibal?

Cross out the box containing each correct answer. When you finish, write the letters from the remaining boxes in the spaces at the bottom of the page.
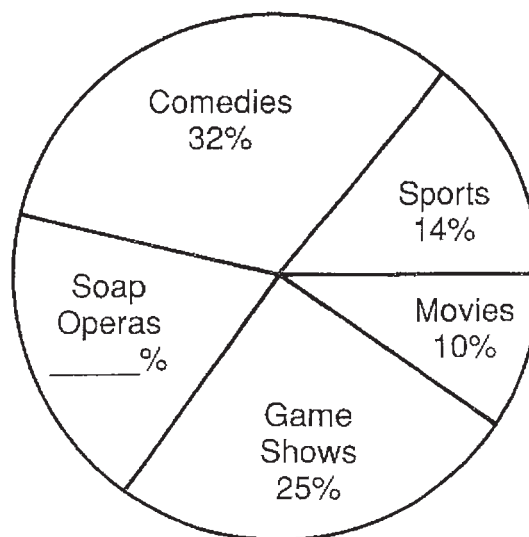
(1) A lion tamer spent a total of $400. The circle graph shows what percent was spent on each item. Find the amount spent on:

A. costumes; B. chairs; C. whips.

(2) What percent of the total was spent on lion toys?

(3) How much money was spent on lion toys?

(4) What percent was spent for chairs and whips combined?

(5) How much money was spent for chairs and whips combined?

Lion Tamer's Expenses
total: $400

Costumes 35%
Chairs 22%
Lion toys ____%
Whips 16%

(6) During the first week of summer vacation, Bosco spent 50 hours watching TV. Use the circle graph to find the amount of time he spent watching:

A. comedies; B. game shows; C. movies.

(7) What percent of the total time was spent watching soap operas?

(8) How much time did Bosco spend watching soap operas?

(9) How much more time was spent watching sports than movies?

(10) What is always the sum of the percents in a circle graph?
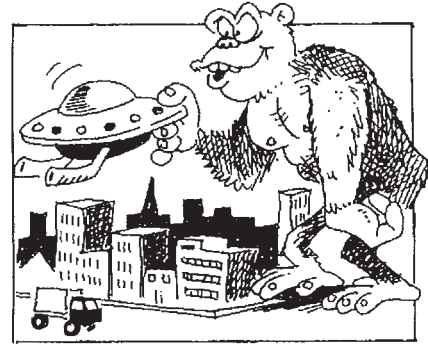
Bosco's TV Viewing
total: 50 h

Comedies 32%
Sports 14%
Soap Operas ____%
Movies 10%
Game Shows 25%

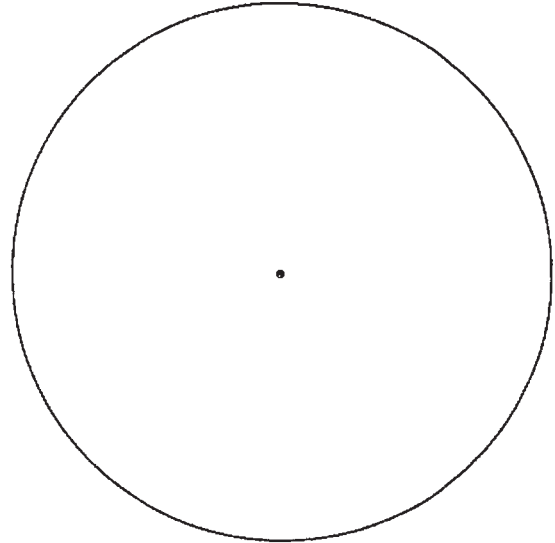| DO	BE	GI	NA	SA	LO	VE	RY	AS	HI
$108	9.5 h	3.5 h	$140	100%	27%	23%	5 h	$152	$112
MA	KE	IN	HA	RD	VE	BI	ND	TE	LL
$144	12.5 h	$88	11 h	38%	2 h	16 h	50%	19%	$64

Why Did King Kong Play with the Flying Saucer?

Complete each table. (Round each answer to the nearest whole number, if necessary.) Write the letter for each answer in the circle at the bottom of the page that contains the answer. Construct a circle graph for each set of data.
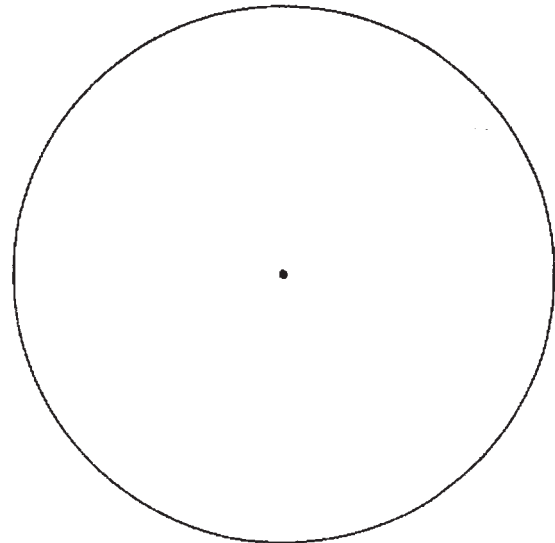
Instruments in the *Arithmics* Rock Band

Family of Instruments	Number of Players	Percent of total	Central angle
Brass	7	(H)	(T)
Woodwind	4	(E)	(G)
Strings	5	(A)	(O)
Percussion	3	(S)	(E)
Keyboard	1	(T)	(I)
TOTAL	20	100%	360°

Clubs at Jaws Junior High

Club	Number of Members	Percent of total	Central angle
Drama	22	(A)	(H)
Crafts	27	(U)	(S)
Computer	16	(E)	(I)
Magic	10	(F)	(T)
Games	15	(H)	(B)
TOTAL		(W)	(R)

86°   54°   22%   40°   35%   90°   30%   72°   17%   5%   80°   65°   126°

100%   25%   108°   13%   24%   46°   11%   360°   18°   15%   61°   20%   18%