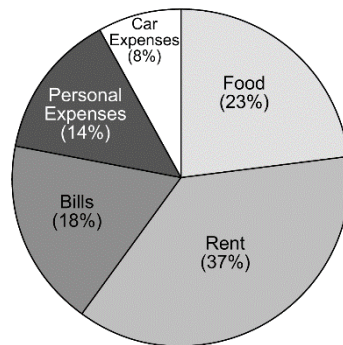


4.6 Interpreting Circle Graphs

1. The circle graph shows Samson’s household budget for a month.

Samson’s Household Budget for One Month



a) Samson takes home \$2500 per month. How much does he budget for each item?

Household Items	Percentage	Fraction	Decimal	Amount of Money Spent on Each Item
Food	23%	$\frac{23}{100}$	0.23	$0.23 \times 2500 = 575$
Rent	37%	$\frac{37}{100}$	0.37	$0.37 \times 2500 = 925$
Bills	18%	$\frac{18}{100}$	0.18	$0.18 \times 2500 = 450$
Personal Expenses	14%	$\frac{14}{100}$	0.14	$0.14 \times 2500 = 350$
Car Expenses	8%	$\frac{8}{100}$	0.08	$0.08 \times 2500 = 200$

b) Samson gets a raise of \$500 per month. How will this affect his **food** budget?

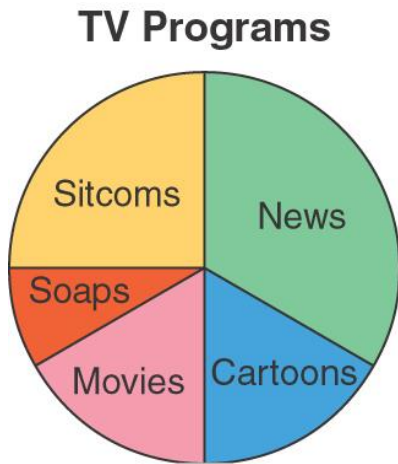
$$\$2500 + 500 = \$3000$$

$$23\% \text{ of } 3000$$

$$0.23 \times 3000$$

$$\$690 \text{ on food.}$$

2. This circle graph shows how much time is spent in one day watching different types of TV programs.



- a) Which type of program is watched for the greatest amount of time? **News**
- b) Which two types of programs are watched for approximately the same amount of time?

Movies and Cartoons

- c) Estimate the fraction of time spent watching sitcoms.

$$\frac{1}{4}$$

- d) Suppose TV is watched for 1000 days.

Estimate how much time is spent watching sitcoms.

$$\frac{1}{4} = 25\%$$

25% of 1000

$$0.25 \times 1000$$

250 days watching
sitcoms.