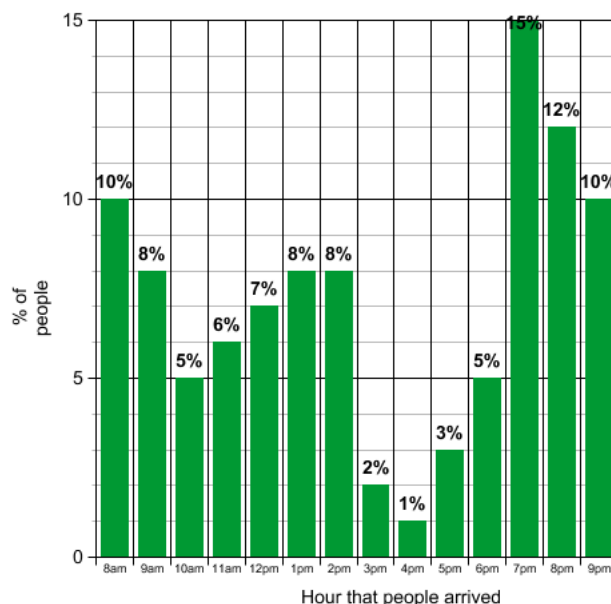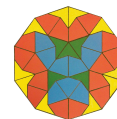## 3.5 Histograms

In this worksheet, we will interpret data using histograms. If you would like further explanation before attempting these problems, links to video descriptions can be found at the end of this worksheet.

1 Jennifer owns a gym and wanted to know which hours were the most popular. She tracked how many clients arrived at different hours and then calcualted what percent of her clientel arrived at each hour and recorded it using a histogram.

(a) What is on the x-axis?

(b) What is on the y-axis?

(c) What percent of people arrived at the gym at 12pm?

2 In a poll in a second grade class, students reported their favorite colors. Build your own histogram using the information in the following table.

Name	Favorite Color
Colette	yellow
Anne	green
Maggie	green
Morgan	purple
Bryan	red
Bill	blue
Sally	green
Sarah	purple
Joe	yellow
Alex	red
Andy	red
John	red

(a) What is the most frequent favorite color?

(b) What percent of kids say that blue is their favorite color?

(c) What is the least frequent favorite color?

3 Laura decides to keep track of how much she runs per week. She takes this information from the table and graphs it in a histogram.

Day of the Week	Miles Run
Sunday	0
Monday	4
Tuesday	5
Wednesday	3
Thursday	5
Friday	5
Saturday	7

(a) What is the most frequent number of miles run per day?

(b) How many miles does Laura run on weekends?

(c) On what day does Laura run the least?

Additional Resources:

- Here you'll find a video explanation about histograms `http://youtu.be/lnxh65Y8e50`

- Here you'll find more info about Histograms: `https://www.khanacademy.org/math/arithmetic/applying-math-reasoni` `reading_data/v/histograms`