Workplace Mathematics 11

Unit 5 Project: Learning Guides 12, 13, 14

STATISTICS & GRAPHS

Student: _____

T.A.: _____

Teacher: _____

MARK:

COMPLETING THIS UNIT PROJECT **/25 marks**

ACTIVITIES:

Complete the following activities:

PART I:

☐ **Broken Line and Bar Graph**

- Use the data provided to create the graphs
- Answer the questions

(Presentation is important)

PART II:

☐ **Circle Graph**

- Use the data provided to determine the fraction, percent and angle
- Create the graph using a protractor

(Presentation is important)

PART III:

☐ **Histogram & questions**

- Use the data provided to create the graph
- Answer the questions

(Presentation is important)

PART I - Broken Line and Bar Graph

REMEMBER: GRAPHING IS ALL ABOUT PRESENTATION. Messy work will be returned or given a reflective mark.

Use the data to the right to create two graphs:

- **a broken-line graph**

and

- **a bar graph.**

Month	Amount of Rain (mm)
January	100 mm
February	70 mm
March	80 mm
April	70 mm
May	50 mm
June	20 mm

For each graph below:

- ☐ include the "scale" (i.e. the months and increments for mm) 1 mark
- ☐ label the axis 1 mark
- ☐ include a title 1 mark

Broken-Line graph

Bar graph

Questions: ***1 mark each***

1.) Which month has the most precipitation?
ANSWER:
2.) How much rain falls in that month?
ANSWER:
3.) Which months have the same amount of rainfall?
ANSWER:
4.) How much more rain falls in January than falls in February?
ANSWER:

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PART II - Circle Graph

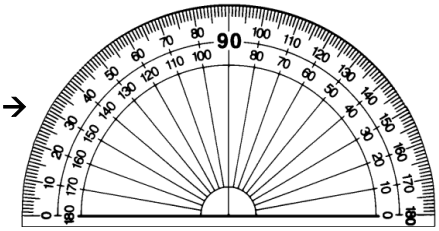
***REMEMBER:** GRAPHING IS ALL ABOUT PRESENTATION. Messy work will be returned or given a reflective mark.*

For each student on the table below fill in: 1 mark per student (5 marks total)

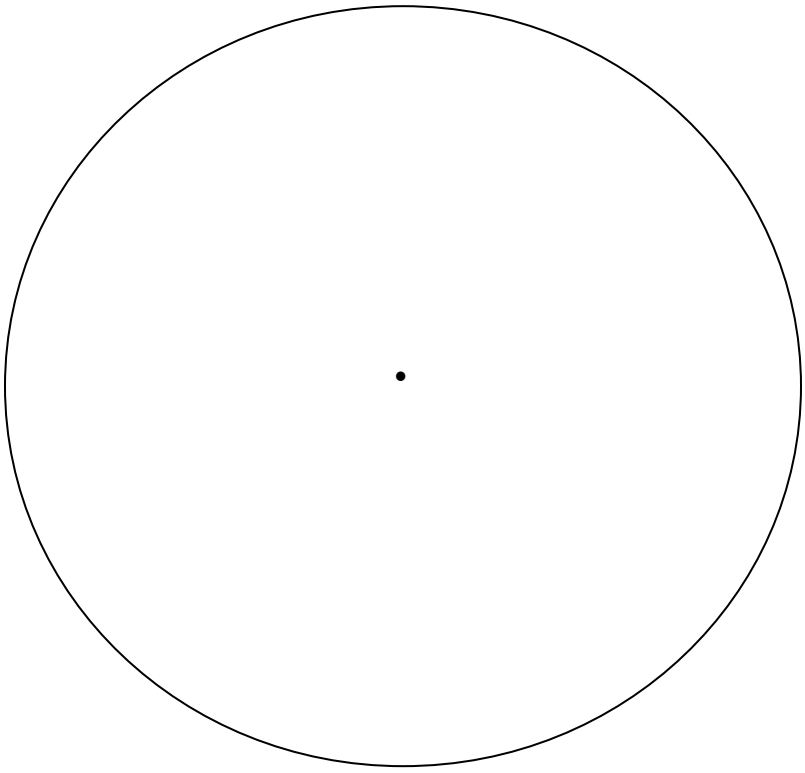
- ☐ the **fraction** of the total
- ☐ the **percent** of the total
- ☐ the **angle** to use when drawing out your pie chart

Student	Hours Worked	Fraction of total	Percent of total	Angle (Used on the pie graph)
Nathan	5			
Sara	8			
Austin	12			
Kaitlyn	5			
Ryan	10			
Total	**40**		**Total**	**360°**

For the next part of the assignment you will need a protractor →



Use the angles determined above and a protractor to create the pie chart below. Make sure that you label the students on the chart or use a "colour legend". 4 marks



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PART III - Histogram

REMEMBER: GRAPHING IS ALL ABOUT PRESENTATION. Messy work will be returned or given a reflective mark.

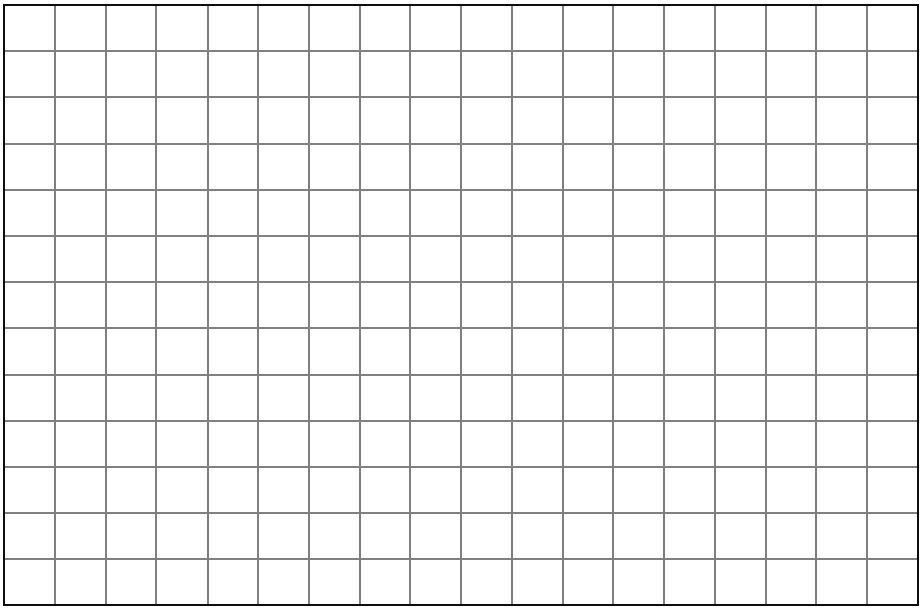
Use the data below to create a histogram.

Television viewing							
Time spent watching TV (hours)	**$0 \le h < 5$**	**$5 \le h < 10$**	**$10 \le h < 15$**	**$15 \le h < 20$**	**$20 \le h < 25$**	**$25 \le h < 30$**	**$h \ge 30$**
# of people	25	90	70	91	35	10	6

On your histogram below:

- ☐ include the "scale" (i.e. the Time and Number of People) 1 mark
- ☐ label the axis 1 mark
- ☐ include a title 1 mark

Histogram



***Questions:* 1 mark each**

1.) How many people watch between 10 and 15 hours of television each week?
ANSWER:
2.) How many people watch less than 15 hours each week?
ANSWER:
3.) How many people watch 15 or more hours of television during the week?
ANSWER:

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