



*Algebra 1B*  
Module 10

Student Name: \_\_\_\_\_ Teacher Name: \_\_\_\_\_

As you work through the chapters in your Algebra 1 course, you will be encouraged to think and to make conjectures while you persevere through challenging problems and exercises. You will make errors – and that’s okay! Learning and understanding occur when you make errors and push through mental roadblocks to comprehend and solve new and challenging problems.

Text: *Algebra 1 Common Core*, Big Ideas, 2015

**To ensure you are learning, you must show your work for all exercises.  
YOU WILL NOT EARN CREDIT FOR ANSWERS WITHOUT WORK.**

**Chapter 10: Radical Functions and Equations (10.1-10.4)**

- \_\_\_\_\_ Maintaining Mathematical Proficiency (Page 541): Complete exercises #1-8 **all**
- \_\_\_\_\_ 10.1 Graphing Square Root Functions: Read the lesson and complete exercises #5, 9, 13, 15, 16, 19, 20, 23, 24, 27, 28, 35  
(free graphing calculator at [www.desmos.com/calculator](http://www.desmos.com/calculator))
- \_\_\_\_\_ 10.2 Graphing Cube Root Functions: Read the lesson and complete exercises #3, 4, 7, 9, 13, 17, 19, 27, 33
- \_\_\_\_\_ 10.3 Solving Radical Equations: Read the lesson and complete exercises #3, 4, 7, 9, 13, 14, 15, 23, 25, 27, 28, 31, 32, 37, 41, 45, 46, 49, 50, 59
- \_\_\_\_\_ 10.4 Inverse of a Function: Read the lesson and complete exercises #3, 5, 7, 9, 10, 13, 16, 19, 20, 23, 29, 31, 35, 43

*Students must complete the Chapter Review with a teacher or tutor at school.*

- \_\_\_\_\_ Chapter Review (pages 576-578): Complete exercises #1-23 **all**

**Chapter 11: Data Analysis and Displays (11.1 -11.5)**

- \_\_\_\_\_ Maintaining Mathematical Proficiency (page 583): Complete exercises #1-3 **all**
- \_\_\_\_\_ 11.1 Measures of Center and Variation: Read the lesson and complete exercises #3, 5, 6, 11, 13, 15, 18, 19, 29, 40, 43, 44, 45, 46
- \_\_\_\_\_ 11.2 Box-and-Whisker Plots: Read the lesson and complete exercises #3-9 **all**, 15, 18, 24, 25, 26
- \_\_\_\_\_ 11.3 Shapes and Distributions: Read the lesson and complete exercises #1, 2, 3, 4, 7, 8, 11, 22





\_\_\_\_\_ 11.4 Two-Way Tables: Read the lesson and complete exercises  
#5-9 all, 13, 14, 21, 33, 34

\_\_\_\_\_ 11.5 Choosing a Data Display: Read the lesson and complete exercises  
#3, 4, 5, 7, 8, 9, 11, 29

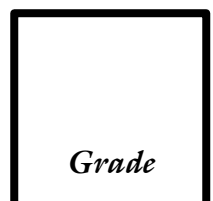
*Students must complete the Chapter Review and Project with a teacher or tutor at school.*

\_\_\_\_\_ Chapter Review (pages 624-626): Complete exercises #1-15 all

\_\_\_\_\_ Complete the attached Project (**No project = No credit**)

**A teacher or tutor reviewed the Chapter Reviews and Project with the student.**

Date: \_\_\_\_\_ Signature: \_\_\_\_\_





**Algebra 1 Project**  
**Module 10: Data Analysis and Displays**  
**Textbook Pages: 583-628**

**Learning Works Surveys**

**Be sure to answer questions in complete sentences.**

**Survey 1:** A survey was conducted with 200 students from Learning Works. Students were asked what career they want to pursue after graduation. Here are the results:

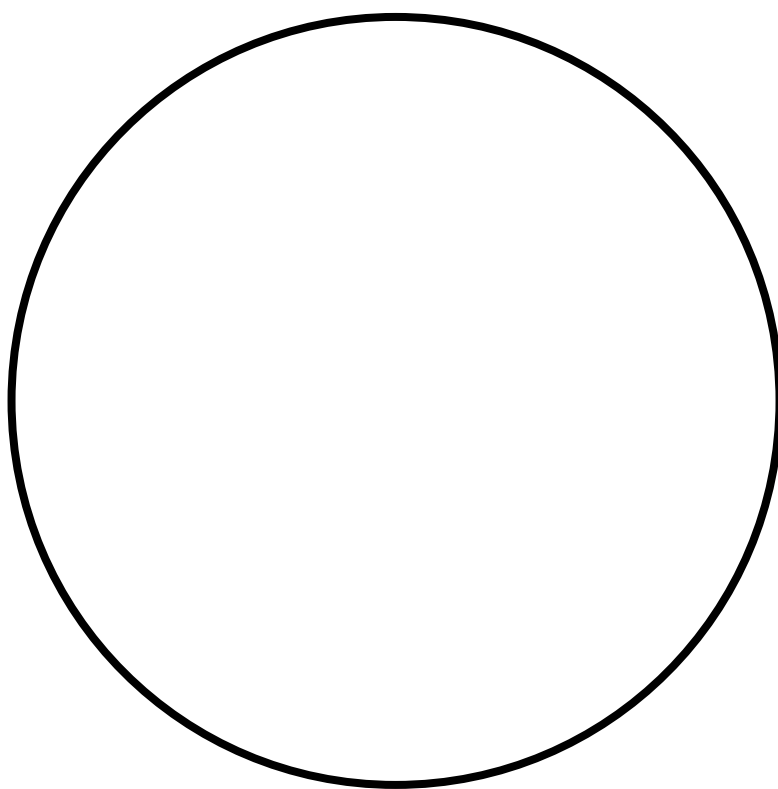
Career	Number of Students	Percent
Registered Nurse/Nursing	34	
Police Officer/Law Enforcement	33	
Military	13	
Firefighter	11	
Cosmetology	16	
Medical Field (Doctor/Pharmacist)	15	
Lawyer	10	
Dental Assistant	10	
College Graduate/Be in School	27	
Veterinarian	9	
Own My Own Business	22	

1.
  - a. Find the percent of students who gave each response out of the total 200 students. Write your answers in the column above.
  
  
  
  
  
  
  
  
  
  
  - b. Display the above data in two different ways: Histogram and circle graph. Please label each graph clearly. (On the next page)

Histogram:



Circle Graph:



2. Explain the difference in the information needed to create each type of graph.

3. Which data display do you like best? Why? Which data display is easiest to read and interpret? Why?

**Survey 2:** During the 2015/2016 school year, 454 students at Learning Works were given a health survey. Below is the data for 2 of the questions asked on the survey.

During the past 30 days, how many times per day did you usually eat fruit?

Frequency	Number of students	Percent of Students
0 times	18	
1 time	69	
2 times	122	
3 times	116	
4 times	51	
5 or more times	78	

- 4.
- Find the percent of students who gave each response out of the total 454 students. Write your answers in the column above.

b. Display the data in a histogram or a circle graph.

c. Find the mean of the data. (For “5 or more times, ” use 5 to find the mean)

During the past 30 days, how many days did you eat food from a fast food restaurant?

Frequency	Number of students	Percent of Students
0 days	19	
1 day	30	
2 days	71	
3 days	75	
4 days	74	
5 days	61	
6 days	33	
7 or more days	91	

5.

a. Find the percent of students who gave each response out of the total 454 students. Write your answers in the column above.



