

Mathematics 9
Unit 9: Probability and Statistics

Text: Math Makes Sense 9

Chapter 9

By the end of this unit, it is expected that students will:

Outcomes	Pages in textbook
<p>1. Demonstrate an understanding of the role of probability in society.</p> <ul style="list-style-type: none"> < Provide an example from print and electronic media (Internet, newspaper), where probability is used. < Identify assumptions associated with probability and explain the limitations of each assumption. < Explain how a single probability can be used to support opposing positions. < Explain, using examples, how decisions based on probability may be a combination of theoretical probability, experimental probability and subjective judgment. 	<p>< Lesson 9.1 Pgs: 424 - 429</p>
<p>2. Describe the effect of bias, use of language, ethics, cost, time, timing, privacy and cultural sensitivity on the collection of data.</p> <ul style="list-style-type: none"> < Analyze a case study of data collection and identify potential problems related to bias, ethics, etc. < Provide examples to illustrate how bias, ethics, etc, may influence the data. 	<p>< Lesson 9.2 Pgs: 431 – 436</p>
<p>3. Select and defend the choice of using either a population or a sample of a population to answer a question.</p> <ul style="list-style-type: none"> < Identify whether a situation represents the use of a sample or a population. < Provide an example where a population may be used to answer a question and justify the choice. < Provide a question where a limitation precludes the use of a population and describe the limitation. < Identify and critique an example in which a generalization from a sample of a population may or may not be valid for the population. 	<p>< Lesson 9.3 Pgs: 437 - 441</p> <p>< Lesson 9.4 Pgs: 445 - 449</p>
<p>4. Develop and implement a project plan for the collection, display and analysis of data by:</p> <ul style="list-style-type: none"> • formulating a question for investigation • choosing a data collection method that includes social considerations • selecting a population or a sample • collecting the data • displaying the collected data in an appropriate manner and • drawing conclusions to answer the questions. <p>< Create a rubric to assess a project that includes the assessment of</p>	<p>< Lesson 9.5 Pgs: 454 - 456</p>

<p>question for investigation, the choice of data collection method that includes social considerations, the selection of a population or a sample justifying the choice, the display of the collected data and the conclusions to answer the question.</p> <ul style="list-style-type: none"> < Develop a project plan that describes a question for investigation, the method of data collection, the method for selecting a population or sample, the method used for data collection and the methods for analysis and display of the data. < Complete the project according to the plan, draw conclusions and communicate findings to an audience. < Self-assess the completed project by applying the rubric. 	
<p>Review Exercises:</p> <ul style="list-style-type: none"> < Mid-Unit Review < Unit Review < Practice Test 	<ul style="list-style-type: none"> < Page 444 < Pgs: 457 - 459 < Page 460