GLOBAL EDITION

Using and Understanding Mathematics

A Quantitative Reasoning Approach

SIXTH EDITION

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ALWAYS LEARNING

PEARSON

Math for College, Career, and Life

We use math in our day-to-day lives even when we don't realize it. The goal of this book is to increase mathematical literacy so we use it more effectively in everyday life. Mathematics can help us to understand a variety of topics and issues, making us more aware of both the uses and abuses of math. The ultimate goal is to become better educated citizens and be successful in our college experiences, our careers, and our lives.

Each chapter offers an **Activity** designed to spur discussion of some interesting facet of the topics covered in the chapter. [p. 314, 5A]

ACTIVITY

Cell Phones and Driving

Use this activity to gain a sense of the kinds of problems this chapter will enable you to study.

Is it safe to use a cell phone while driving? The science of statistics provides a way to approach this question, and the results of many studies indicate that the answer is no. The National Safety Council estimates that approximately 1.6 million car crashes each year (more than a quarter of the total) are caused by some type of distraction, most commonly the use of a cell phone for talking or texting. In fact, some studies suggest that merely talking on a cell phone makes you as dangerous as a drunk driver. As preparation for your study of statistics in this chapter, work individually or in groups to research the issues raised in the following questions. Discuss your findings.

IN YOUR WORLD

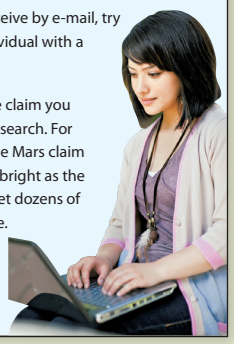
Web Searches to Verify Web Sources

While some information on the Web is inaccurate or biased, the Web is also a great source for checking the accuracy of information. A good way to start is with "fact checking" websites, as long as you also verify that the fact checkers have a reputation for fairness and accuracy. A few reputable fact-checking sites include:

rg, supported by the non-
lic Policy Center; PolitiFact.
he Fact Checker," a blog
e.
dd claims, Snopes.com

- To check the validity of messages you receive by e-mail, try TruthOrFiction.com, run by a private individual with a reputation for fairness and accuracy.

If none of those sources has covered the claim you are investigating, try a plain language Web search. For example, if you type the first sentence of the Mars claim ("On August 27, Mars will look as large and bright as the full Moon…") into a search engine, you'll get dozens of hits that discuss the claim and why it is false. Of course, if your search turns up conflicting claims about accuracy, you'll still need to decide which claims to believe.



IN YOUR WORLD

47. **Political Action.** This unit outlined numerous budgetary problems facing the U.S. government, as they stood at the time the book was written. Has there been any significant political action to deal with any of these problems? Learn what, if anything, has changed over the past couple of years, then write a one-page position paper outlining your own recommendations for the future.
48. **Debt Problem.** How serious a problem is the gross debt? Find arguments on both sides of this question. Summarize the arguments, and state your own opinion.

In Your World boxes focus on topics that students are likely to encounter in the world around them, whether in the news, in consumer decisions, or in political discussions. This is further enhanced with In Your World exercises, designed to spur additional research or discussion that will help students relate the unit content to the themes of college, careers, and life. [p. 309, 4F and p. 39, 1A,]

Does It Make Sense? questions test conceptual understanding by asking students to decide whether the given statements are sensible and to explain why or why not. These questions encourage students to stop and think critically about a problem rather than just focusing on getting an answer. [p. 380, 5E]

DOES IT MAKE SENSE?

Decide whether each of the following statements makes sense (or is clearly true) or does not make sense (or is clearly false). Explain your reasoning.

7. There is a strong negative correlation between the price of tickets and the number of tickets sold. This suggests that if we want to sell a lot of tickets, we should lower the price.
8. There is a strong positive correlation between the amount of time spent studying and grades in mathematics classes. This suggests that if you want to get a good grade, you should spend more time studying.

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Table of Contents

Table of Contents

Table of Contents

Table of Contents