



THE ACTUARIAL FOUNDATION®

Preparing for Tomorrow's Possibilities

Mission Statement

To develop, fund and execute education and research programs that serve the public by harnessing the talents of actuaries.

Supporting Actuarial Organizations



AMERICAN ACADEMY *of* ACTUARIES



ASPPATM

WORKING FOR AMERICA'S RETIREMENT



SOCIETY OF ACTUARIES

Consumer Education

Products contribute to the public understanding of today's most important social issues and financial decision-making options.



Consumer Education

- Don't Run with Your Retirement Money
- Money Matters: Financial Consumer Tip Sheets
- Taking the Mystery out of Retirement Planning
- Seven Life-Defining Financial Decisions
- If Disaster Strikes, Will You be Covered?
- Making Your Money Last for a Lifetime
- Disability Insurance: A Missing Piece of the Financial Security Puzzle



Research, Scholarships, Awards & Prizes

- **Funding the future of actuarial research:**
 - Individual Grants Competition
 - Briefs, Symposiums, textbooks.....
- **Sponsoring tomorrow's actuaries with scholarship opportunities:**
 - John Culver Woody Scholarship
 - *Actuary of Tomorrow* - Stuart A. Robertson Memorial Scholarship
 - Actuarial Diversity Scholarship
 - Caribbean Actuarial Scholarship
- **Awards and Prizes:**
 - ERM Best Paper Award
 - David Garrick Halmstad Prize
 - John Hanson Memorial Prize
 - Wynn Kent Public Communication Award



Youth Education

Building a Library of Resources

Math Academy
Are You Game?
Explorations in Probability



Math Academy
Dining Out!
Explorations in Fractions, Decimals, & Percents



ADVANCING STUDENT ACHIEVEMENT.
A project of THE ACTUARIAL FOUNDATION



Expect the Unexpected With **Math**

CONVERSIONS ROCK

FRACTIONS	DECIMALS	PERCENTS
FRACTION TO DECIMAL $\frac{1}{4} = .25$ Divide the numerator by the denominator.	DECIMAL TO PERCENT .25 = 25% Move point two places to the right.	PERCENT TO DECIMAL 25% = .25 Move point two places to the left.
FRACTION TO PERCENT $\frac{1}{4} = .25 = 25\%$ Divide the numerator by the denominator, add the name percent, and the name goes two places to the right.	DECIMAL TO FRACTION .25 = $\frac{25}{100} = \frac{1}{4}$ Move point two places to the right and put one in the numerator. Put the number over 100 and simplify the fraction.	PERCENT TO FRACTION 25% = $\frac{25}{100} = \frac{1}{4}$ Put number over 100 and simplify the fraction.
Some Common Equivalent Conversions: $\frac{1}{2} = .50 = 50\%$ $\frac{1}{8} = .125 = 12.5\%$ $\frac{1}{4} = .25 = 25\%$ $\frac{1}{10} = .10 = 10\%$ $\frac{1}{5} = .20 = 20\%$ $\frac{1}{10} = .0625 = 6.25\%$		

SCHOLASTIC

DEVELOPED WITH THE ACTUARIAL FOUNDATION

BY CLOPPER WITH THE ACTUARIAL FOUNDATION

October Release

Expect the Unexpected With
Math

SETTING THE STAGE WITH **GEOMETRY**

Abbreviations

A = area	P = perimeter
b = base	$\pi = \text{pi} = 3.14$
BA = base area	r = radius
C = circumference	SA = surface area
d = diameter	slant h = slant height
h = height	V = volume
l = length	w = width

2D Shape Formulas

Perimeter: the total distance around the outside of a polygon

RECTANGLE: $P = 2 \cdot (l + w)$

CIRCLE: $C = \pi \cdot d$

TRIANGLE: $P = \text{side } a + \text{side } b + \text{side } c$

Area: the measure of a bounded region of a two-dimensional shape expressed in square units

RECTANGLE: $A = l \cdot w$

CIRCLE: $A = \pi \cdot r^2$

TRIANGLE: $A = 1/2 \cdot (b \cdot h)$

3D Shape Formulas

Surface Area: the sum of all the areas of all surfaces of a three-dimensional object, measured in square units

RECTANGULAR PRISM: $SA = 2 \cdot (l \cdot w + l \cdot h + w \cdot h)$

CYLINDER: $SA = (2 \cdot \pi \cdot r^2) + (\pi \cdot d \cdot h)$

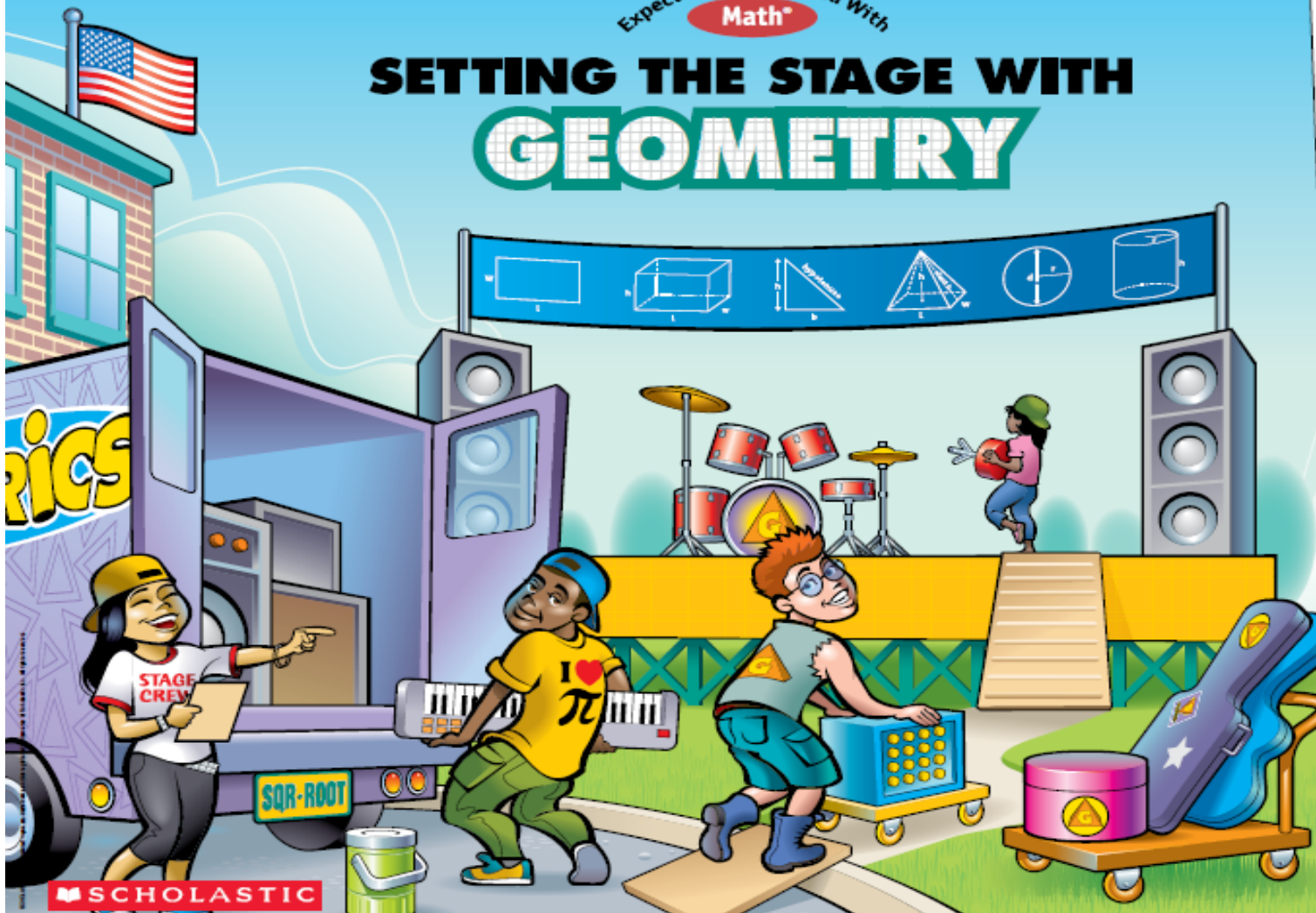
SQUARE PYRAMID: $SA = (BA) + 1/2 \cdot P \cdot \text{slant } h$

Volume: the amount of space inside a three-dimensional shape, measured in cubic units

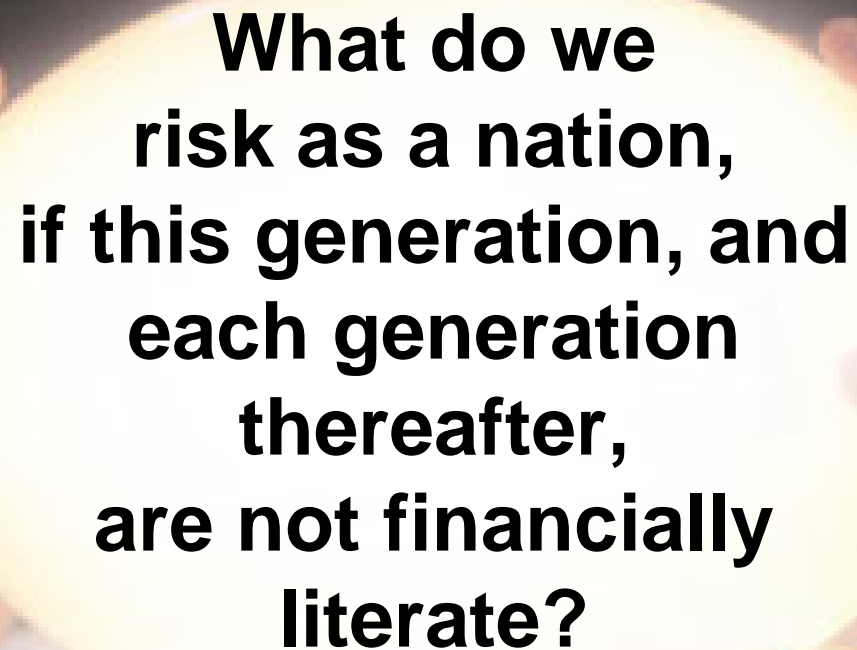
RECTANGULAR PRISM: $V = l \cdot w \cdot h$

CYLINDER: $V = \pi \cdot r^2 \cdot h$

SQUARE PYRAMID: $V = 1/3 \cdot BA \cdot h$



Question



**What do we
risk as a nation,
if this generation, and
each generation
thereafter,
are not financially
literate?**

Answer

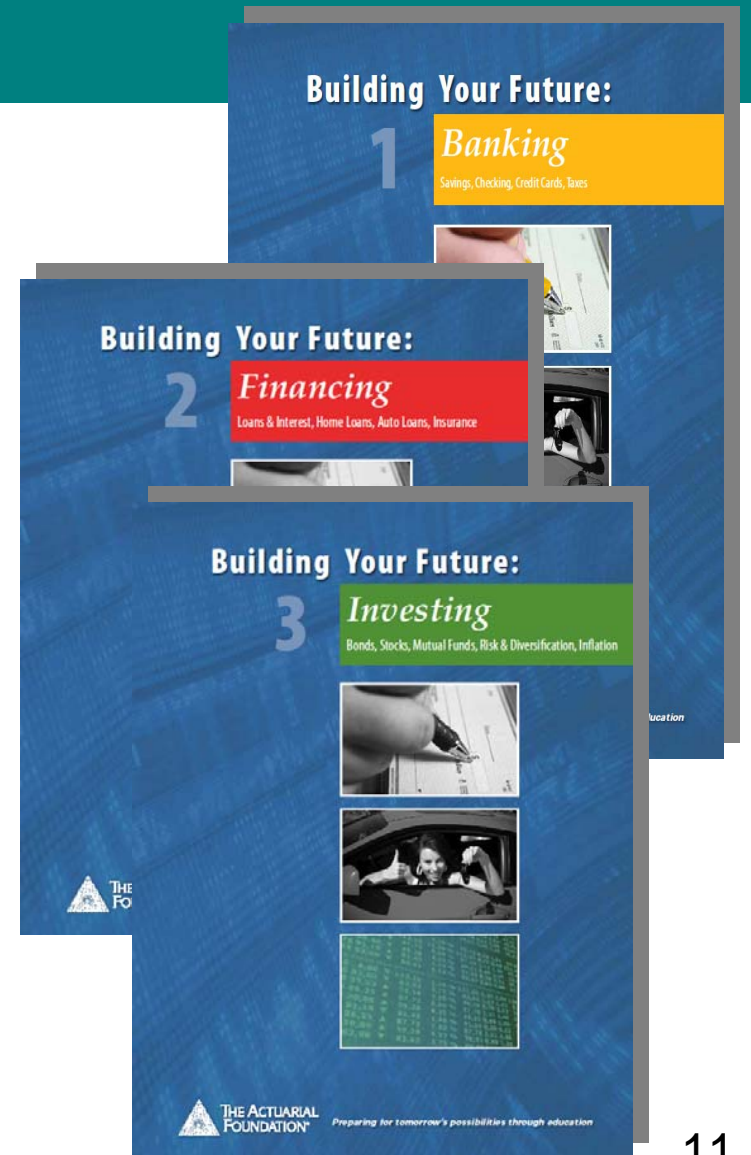


**The
Nation**

Building Your Future

Did You Know?

- Of 6,000 students who took the Jump\$tart® personal finance survey, 62% failed.
- Fewer than 30% of high school students take as much as one week's worth of study in personal finance.
- Teens spend nearly 30% of their monthly income just on debt repayment.



Building Your Future

- **Book One – Banking**
Savings/checking accounts, credit cards and taxes
- **Book Two – Financing**
Loans and interest, home loans, auto loans and insurance
- **Book Three – Investing**
Bonds, stocks, mutual funds, risk and diversification and inflation



An economy without financial literacy is like a landscape with no water...

QUENCH THE THIRST



You Can Make A Difference

- Your \$250 donation provides a high school with one classroom set, and . . .
 - You can select a high school from the over 400 schools requesting a classroom set, or choose a school
 - A letter acknowledging you as the donor, if you wish
- Your donation is 100% tax deductible and should be considered an investment in the future of America!

QUENCH THEIR THIRST

Thank You



THE ACTUARIAL FOUNDATION®

Preparing for Tomorrow's Possibilities

WWW.ActuarialFoundation.org