New current-event-based math puzzle each week! www.scholastic.com/math/news

SCHOLASTIC
MATH
Keke's Combos

BLACK HISTORY MATH p. 6
DOWN WITH BULLIES p. 8

Issue Date	9/6	9/27	10/18	11/8 & 11/22	12/13	1/10	1/31	2/21	3/14	4/11	5/2

Have you and your students checked out our free daily KenKen puzzles at www.scholastic.com/math/kenken? If you haven't yet, you'll probably want to read our career profile on pages 10–11. It will walk you through how these sudoku-like puzzles work. They are a great combination of computation skills and logic. And the online version works wonderfully on interactive whiteboards. Let me know what you think! (E-mail and phone number to the right.)

   I'd also like to point out our Black History Month coverage on pages 6–7. We incorporate a few mathematicians and scientists who are new to the magazine.

Until next time,

Jack Silbert
Jack Silbert, Editor

Have a question or comment about an article? E-mail me! MathMag@scholastic.com or call (212) 343-6407

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SKILLS GUIDE

▦ = Calculator Use Suitable   ♡ = Critical Thinking   ✎ = Writing in Math

ARTICLE	MAJOR FOCUS	REAL-LIFE CONNECTIONS	SUPPLEMENTARY SKILLS	NCTM STANDARDS*
ACTIVITY: cover **Keke's Combos** ♡	Combinatorics	• Actress Keke Palmer • Mixing and matching clothes	• Whole number ×	1, 2, 6, 8, 9
FAST MATH: p. 2 ♡	Mixed skills	• Record auction price for book • NBA rookie Jeremy Lin	• Equivalent measures; function table; exchange rate; averages	1, 2, 4, 5, 8, 9, 10
MATH FOR YOUR DAILY LIFE: p. 4 **Know Your Text Behavior** ♡	Consumer skills: text message costs	• Singing group Mindless Behavior • Texting plans	• Reading a chart • Money +, −, ×	1, 4, 7, 8, 9, 10
FEATURE: p. 6 **Black History Math!**	Equivalent decimals and percents	• African-American mathematicians and scientists	• Decimal ×	1, 8
STATISTICS: p. 8 **Bullied to the Brink** ♡ ✎	Reading a circle graph	• Stopping the national bullying epidemic	• Percent of a number • Visualizing fractions	1, 5, 7, 8, 9, 10
MATH AT WORK: p. 10 **Puzzle Man** ♡	Problem solving: using logic	• How to play KenKen math game • Career: puzzle editor	• Whole number +, −, ×, ÷ • Writing equations	1, 2, 6, 7, 8, 10
SPORTS BY THE NUMBERS: p. 12 **Scales for Scales**	Customary measures: adding pounds and ounces	• Teen fishing champs • Bassmaster Classic scoring	• Whole number +, −, ÷ • Completing a chart	1, 4, 8, 9, 10
MATH WIZ COMICS: p. 14 **Begone, Polygons!**	Sum of polygons' interior angle measures	• Comic strips as a literacy tool	• Using a formula • Whole number +, −, ×, ÷	1, 3, 4, 8
STAR WRAP: back page **I Am Number $\frac{36}{9}$**	Equivalent ratios	• Actor Alex Pettyfer • Movie *I Am Number Four*	• Cross-multiplication • Three forms to write ratios	1, 8

*NCTM Middle School Curriculum Standards
1. Number and Operations
2. Algebra
3. Geometry
4. Measurement
5. Data Analysis & Probability
6. Problem Solving
7. Reasoning and Proof
8. Communication
9. Connections
10. Representation

For more detailed information about the National Council of Teachers of Mathematics Standards, write to: NCTM, 1906 Association Drive, Reston, VA 20191-9988. Phone: (703) 620-9840. Fax: (703) 476-2970. E-mail: infocentral@nctm.org

■ *DON'T MISS OUR MARCH 14 ISSUE...*

ACTIVITY: March 14? That's Pi Day! Celebrate with a slice of our wacky Pi Day Pies. And find the **circumference and area** while you're at it.

FEATURE: As *Dancing With the Stars* returns, last season finalist Kyle Massey explains the **percent**-based scoring system.

MATH AT WORK: How do they figure out pet-insurance premiums? Let's find out!

MATH WIZ COMICS: Meet the winner—and winning villain—from our fall contest!

...AND MUCH, MUCH MORE!

SUPPLEMENT TO SCHOLASTIC MATH

COVER
Keke's Combos

If students have not solved a combinations problem such as this, use real objects to introduce the concept. Use two different cups (**S**tyrofoam, **P**lastic) and three types of beverages (**W**ater, **T**ea, **C**offee). Ask how many ways a beverage and a cup can be selected? [Answer: SW, ST, SC, PW, PT, PC; Note: $2 \times 3 = 6$] Ask how the answer would change if there were 4 beverages, including **L**emonade. [Answer: SW, ST, SC, SL, PW, PT, PC, PL; Note: $2 \times 4 = 8$] Making a list of all the combinations is a good way to start; students should soon see how multiplication applies.

PAGES 2 – 3
Fast Math

Critic's Corner: *How I Met Your Mother*: Students are often unsure whether to multiply or divide by a conversion fact and in this instance they are told they must divide.
Big Book, Birds, Bucks: Another conversion problem, but this time the operation is not stated. It helps to write: If $1 (U.S.) ≈ 0.64 pounds, then 7,300,000 pounds ≈ \underline{?}
Spotlight on... Jeremy Lin: Have students estimate first. ($480 \div 30 = 16$)

PAGES 4 – 5
Know Your Text Behavior

Students will be eager to share information about their own texting plans. This should help to get a few examples posed as a warm-up. Discuss why mobile carriers offer different rate plans.

PAGES 6 – 7
Black History Math!

Warm up with a quick matching activity. Write a column of numbers and in a second column the percent equivalents, but in random order. Be sure to have pairs of numbers that have the same digits but the decimal point is in a different location. Example: 0.4, 4.0, and 0.04. Remind students: Percents greater than 100 are OK!

PAGES 8 – 9
Bullied to the Brink

Hopefully this article can be a starting point for a discussion. The circle graph is based upon more than 1 million students surveyed. You could ask students to respond anonymously, and if comfortable, add tally marks to show the students their responses. Talk about how to interpret the data in a circle. The circle graph shows 100% of the responses and each sector is a percent of the whole. Students should observe that the percents add to 100%.

PAGES 10 – 11
Puzzle Man

Some of your students may have already tried KenKen and will be excited to try again. To get started, have students read the introduction and then work through 3-4 steps with them. Then students should be ready to work on their own or with a partner.
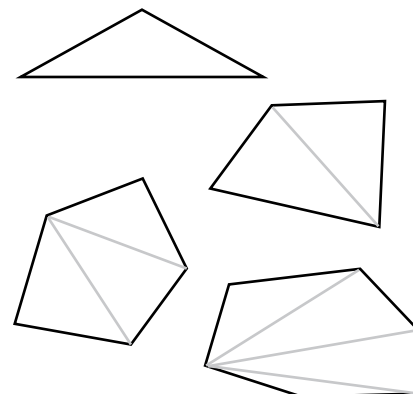
PAGES 12 – 13
Scales for Scales

Hold up two reams of paper and state that one ream weighs 1 pound 10 ounces. What is the combined weight? Two reams would be 2 pounds 20 ounces. Discuss how this could be simplified to 3 pounds 4 ounces. This is equivalent to adding mixed numbers whose denominators are 16.

PAGES 14 – 15
Begone, Polygons!

If students are not familiar with the angles sum formula for polygons, you should develop that idea first. One common way is to draw all the diagonals from one vertex of the polygon and count the number of triangles: The number will be 2 less than the polygon's number of sides.

**For a list of
ONLINE RESOURCES
related to this issue, visit:**

www.scholastic.com/math/links

COVER
Keke's Combos

Building on our Teaching Tip: Ask how many ways you could select a cup (styrofoam, plastic), size (S, M, L), and beverage (water, tea, coffee, lemonade). [$2 \times 3 \times 4 = 24$]

PAGES 2 – 3
Fast Math

Critic's Corner: *How I Met Your Mother*: If 1 mile ≈ 1.6 km, then 1 km ≈ \underline{?} mile?
ColuMMMn A: Students should state the rule in words: Numbers in column A × 7 = numbers in column B.
Big Book, Birds, Bucks: What is the current conversion rate for U.S. dollars and British pounds? How much would the book cost in U.S. dollars now?

PAGES 4 – 5
Know Your Text Behavior

Consider Dash Wireless; if 200 texts are sent, what is the cost per text? If 1,500 texts are sent, what is the cost per text? Locate different text message plans online and have students analyze the plans.

PAGES 6 – 7
Black History Math!

Have students find examples of percents that are less than 1%, contain a decimal (i.e. 3.5%), are close to a benchmark percent, and one that is greater than 100%. Students should look for the percents written in magazine and newspaper articles, and on grocery store items.

You may also want to have students research other African-American mathematicians and scientists and present their findings to the class.

PAGES 10 – 11
Puzzle Man

When students finish this 4×4, visit our Web site (www.scholastic.com/math/kenken) for a new 4×4 and a 5×5 posted each day. You can also sign up for a free classroom program in which you'll receive even more puzzles. Students may even be inspired to create their own KenKen puzzle. I have two students who make puzzles for classmates.

PAGES 12 – 13
Scales for Scales

Find the range for each day. For Day 1, the range would be 19 lbs 8 oz – 8 lbs 9 oz = 10 lbs 15 oz.

BACK PAGE
I Am Number $\frac{36}{9}$

If students have not studied the Cross Products Property, model this first. Relate equivalent ratios to equivalent fractions.

**Teaching tips and extension activities
written by Dr. Laurie Boswell**
Laurie is a teacher and the headmaster of Riverside School in Lyndonville, Vermont.

THERE IS LOTS OF STUFF FOR YOUR STUDENTS ON OUR WEB SITE TOO!

• **Glossary of math terms covered in the magazine**

• **Student poll based on a topic from the issue**

• **The super-fun math game KenKen— new puzzles posted daily!**

• **Links to safe Internet sites related to the articles in the issue**

• **Forms to submit Major Math Mistakes, original puzzles, and Critic's Corner ideas**

WE WANT TO WRITE ABOUT YOUR STUDENTS!

Do any students in your class...

• **run their own business?**
• **have a unique hobby?**
• **help out the community?**

If you know a student who you think could be the subject of a *MATH* Magazine article, let us know!

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