



SCHOLASTIC

MATH

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TEACHER'S GUIDE
APRIL 13, 2015
 VOL. 35, NO. 11 ISSN 1041-1410
 SUPPLEMENT TO SCHOLASTIC MATH



ISSUE DATES	9/1	9/15	10/6	10/27	11/17	12/8	1/12	2/2	3/2	3/23	4/13	5/4
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Registration is now required for access to your online resources.
www.scholastic.com/math YOUR ACCESS CODE: **numerator**

Dear Teacher,
 In honor of National Financial Literacy Month, we've compiled materials to help you introduce students to crucial financial concepts—like income, expenses, and savings. This issue features a story, an instructional video, and supplementary skills sheets on how to build a personal budget. As an added bonus, we've also included a free financial literacy supplement from T. Rowe Price! This engaging guide to smart spending for teens is available as a downloadable PDF. Access it at www.scholastic.com/math.

Enjoy—and happy financial planning!

Best wishes, the Editors
mathmag@scholastic.com

VIDEO: Writing a Budget

income		expenses	
tutoring	\$60	bus fare	\$16
allowance	\$20	snacks	\$22
check from grandma	\$15		
total income:		total expenses:	

00:35 PAUSE 01:27

SKILLS GUIDE

PAGE	SKILL & ARTICLE TITLE	COMMON CORE STATE STANDARDS	ONLINE RESOURCES www.scholastic.com/math
4	Rate Reasoning WIND CATCHER	Ratios and Proportions: Use rate reasoning to solve real-world problems.	<ul style="list-style-type: none"> Download a differentiated Common Core skills sheet, plus 5 More Questions. Watch a background video. Learn more with Web Links.
6	Financial Literacy YOUNG YOGI	The Number System: Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., credits/debits).	<ul style="list-style-type: none"> Download a differentiated Common Core skills sheet, plus 5 More Questions. Watch an instructional video. Learn more with Web Links.
8	Box-and-Whisker Plots COUNTING ON LEMURS	Statistics & Probability: Summarize numerical data sets in relation to their context, such as by describing any overall pattern and any striking deviations.	<ul style="list-style-type: none"> Download a differentiated Common Core skills sheet, plus 5 More Questions. Watch a background video. Learn more with Web Links.
12	Statistics GARBAGE OVERLOAD	Statistics & Probability: Summarize numerical data sets in relation to their context.	<ul style="list-style-type: none"> Learn more with Web Links.
14	Mixed Skills CAMEL CAM	Mathematical Practice: Look for entry points, plan solution pathways, and check answers for a variety of word problems.	<ul style="list-style-type: none"> Download a differentiated Common Core skills sheet, plus 5 More Questions. Watch a background video. Learn more with Web Links.
16	Metric Conversions NOLAN LOVES NATURE	Ratios & Proportional Relationships: Convert measurement units.	<ul style="list-style-type: none"> Play a game.

Problem of the Day

TRY ONE OF THESE QUICK EXERCISES EACH DAY AS A FAST, FUN WAY TO START YOUR MATH LESSON!

<p>DAY 1</p> <p>How far will a motorcyclist travel in 45 minutes at a constant rate of 68 miles per hour?</p>	<p>DAY 2</p> <p>What angle is formed at the intersection of two perpendicular lines?</p>	<p>DAY 3</p> <p>Solve for x: $4 - 14 + 2x = -20$</p>	<p>DAY 4</p> <p>If a household consumes 750 kilowatt-hours (kWh) of electricity every month, how many megawatt-hours (MWh) will it consume in a year? (Hint: 1,000 kWh = 1 MWh)</p>	<p>DAY 5</p> <p>The average distance between Mars and Earth is about 140,000,000 miles. Express this distance in scientific notation.</p>
<p>DAY 6</p> <p>Express $\frac{27}{4}$ as a mixed number.</p>	<p>DAY 7</p> <p>If cocoa farmers produce 4.15 million tons of cocoa in one year and consumers eat 4.37 million tons, what will be the deficit?</p>	<p>DAY 8</p> <p>The weights, in pounds, of five ring-tailed lemurs are 4.5, 3.5, 5.7, 4.2, and 4.8. What is the median of this data set?</p>	<p>DAY 9</p> <p>$2 \times (25 \div 5) - 4 \div 2 =$</p>	<p>DAY 10</p> <p>What is the least common denominator of $\frac{1}{5}$ and $\frac{3}{14}$?</p>
<p>DAY 11</p> <p>Choose a symbol ($<$, $>$, $=$) to complete the inequality when $x = 4$:</p> <p>$7x - 2$ _____ $10x \div 4$</p>	<p>DAY 12</p> <p>$\frac{22}{7} \div \frac{26}{14} =$</p>	<p>DAY 13</p> <p>What is the sum of the angles in a trapezoid?</p>	<p>DAY 14</p> <p>The quotient of one negative integer and one positive integer will be _____.</p> <p>A. positive B. negative</p>	<p>DAY 15</p> <p>Write the following phrase as an algebraic expression: 50 divided by the sum of 7 and a.</p>
<p>DAY 16</p> <p>India's estimated 2,200 tigers represent about 70% of the global population. What is the approximate total global tiger population? Round to the nearest whole number.</p>	<p>DAY 17</p> <p>How many centimeters are in one meter?</p>	<p>DAY 18</p> <p>Simplify $\sqrt{63}$ by finding the largest perfect square factor.</p>	<p>DAY 19</p> <p>In 2000, the U.S. threw out 244 million tons of waste. By 2012, this amount had increased by 2.8%. How much waste was thrown away in 2012? Round to the nearest million.</p>	<p>DAY 20</p> <p>What is the area of a triangle with a base of 6 inches and a height of 11 inches?</p>

ANSWERS

TG PAGE 5

SKILLS REVIEW

- 3 high-power turbines
- 5 mid-power turbines
- \$42
- \$960
- 0.3 pounds
- The Coquerel's sifaka, because its lowest recorded body mass is larger than the ring-tailed lemur's highest recorded body mass.
- 720 photos
- 63:133, $\frac{63}{133}$, or 63 to 133
- 4,000
- 2,000

TG PAGE 6

PROBLEM OF THE DAY

- 51 miles
- 90°
- $x = -15$
- 9 MWh
- 1.4×10^8
- $6\frac{3}{4}$
- 220,000 tons
- 4.5 pounds
- 8
- 70
- >

- $\frac{22}{13}$ or $1\frac{9}{13}$
- 360°
- B
- $\frac{50}{(7+a)}$ or $50 \div (7+a)$
- 3,143 tigers
- 100
- $3\sqrt{7}$
- 251 million tons
- 33 square inches

DATA ANALYSIS FOR GRADES 7-8. SCHOLASTIC.COM/UNEXPECTEDMATH

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POSTAL INFORMATION: SCHOLASTIC MATH MAGAZINE (ISSN 0198-8379; in Canada, 2-c no. 9386; USPS 567-350) is published 12 times during the school year; biweekly September, October, March; monthly November, December, January, February, April, May; by Scholastic Inc., 2931 E. McCarty St., P.O. Box 3710, Jefferson City, MO 65102-3710. Periodical postage paid at Jefferson City, MO 65102 and additional mailing offices. POSTMASTERS: Send notice of address changes to SCHOLASTIC MATH MAGAZINE, 2931 East McCarty St., P.O. Box 3710, Jefferson City, MO 65102-3710. **PUBLISHING INFORMATION:** U.S. prices: \$8.25 each per year, \$5.45 per semester, for 10 or more subscriptions to the same address. Fewer than 10 subscriptions, each: \$24.95 student, \$29.99 Teacher's, per school year. Single copy: \$5.50 student, \$6.50 Teacher's. Communications relating to subscriptions should be addressed to SCHOLASTIC MATH MAGAZINE, 2931 East McCarty Street, P.O. Box 3710, Jefferson City, MO 65102-3710, or call toll-free: 1-800-SCHOLASTIC, or on the Web, www.scholastic.com/custsupport. Communications relating to editorial matter should be addressed to Karina Hamalainen, SCHOLASTIC MATH MAGAZINE, 557 Broadway, New York, NY 10012-3999. E-mail address: MathMag@scholastic.com. ©2015 by Scholastic Inc. All rights reserved. Material in this issue may not be reproduced in whole or in part in any form or format without special permission from the publisher.

ANSWERS

PAGES 2-3

NUMBERS IN THE NEWS

Cocoa Catastrophe?

-208,000 tons

Spotting Stripes

44%

Electric Ride

42x

Do the Math

1662

PAGE 4

WIND CATCHER

1a. 438,276 mid-power turbines

1b. 175,310 BATs

2a. 30 square feet

2b. 387,597 homes

3. 6,136 BATs

4. 33,719 homes

5. 474,273 BATs

PAGE 6

YOUNG YOGI

1. \$768

2a. \$100

2b. \$48

3. \$40

4. \$47

5a.

Jaysea's Monthly Budget			
INCOME		EXPENSES	
Yoga classes	\$768	Studio rental	\$100
Allowance	\$40	Yoga supply fund	\$48
		Surfing	\$47
Total Income:	\$808	Total Expenses:	\$195

5b. \$613

5c. \$7,356

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COUNTING ON LEMURS

1. Mongoose lemur

2. Coquerel's sifaka

3. Aye-aye

4. Red ruffed lemur

5. Median (Q2) and upper (Q3) quartiles

6. The aye-eyes have a smaller total range of weights and a higher median weight than ring-tailed lemurs.

7. The largest ring-tailed lemur weighs more.

8. Box-and-whisker plots are helpful for showing the distribution of values in a large data set, including the median value and high and low outliers. However, they show only a summary of the data and so are not helpful if you need exact values within a set of data.

PAGE 12

GARBAGE OVERLOAD

1. C **2.** A **3.** D **4.** D **5.** B

6. C

7. 3,500 gallons

8. About 220%; please accept all reasonable answers.

9. About 0.5 pounds less

10. 161.7 million cubic yards

PAGE 14

CAMEL CAM

1a. 180 pictures

1b. 10 seconds

2. 45 kilometers

3. 46.1 times as many

4. 68%

5. 40:65 or 8:13

BACK PAGE

NOLAN LOVES NATURE

1. A

2. A

3. B

4. B

5. A

*To find the answers online,
click on "Teaching Resources."*