



oaklandathletics.com

RYAN SWEENEY
OUTFIELD



Oakland A's 2009 Math Educational Program
6th-8th Grade Workbook

ROSS
DRESS FOR LESS

Comcast
SPORTSNET
**** CALIFORNIA

EARN 2 VOUCHERS TO A 2009 A's GAME!

ELIGIBILITY

Students from 1st through 8th grade are eligible to participate in the Mathletics program.

INSTRUCTIONS

1. Solve all the problems in this workbook and write your answers on the answer sheet provided.
2. Mail answer sheets with a self addressed envelope to:
Oakland A's
c/o Mathletics Program
7000 Coliseum Way
Oakland, CA 94621
3. All Mathletics answer sheets must be postmarked by **Wednesday, July 1st, 2009.**
NO late answer sheets will be accepted after this date.

Every student who turns in an answer sheet by the deadline will receive Two (2) vouchers to a 2009 A's game. Some restrictions may apply.
Please see the back of the voucher for more details.

Teachers, Coaches, and Youth Leaders: Order as many free Mathletics workbooks as you need and take your entire class, team, or group to an Oakland A's game. We ask that all groups are sent back together in ONE packet and we will mail all vouchers back to ONE contact person for distribution. Please attach a note with the total number of answer sheets included as well as the name of the students who are purchasing additional vouchers (as well as the number being purchased). It is also a good idea to keep a copy for your records so you know which students should receive additional vouchers.

PARENTS: You may purchase additional vouchers by filling out the attached voucher request form. Additional vouchers will be mailed with the complimentary vouchers. The Oakland A's are not responsible for answer forms that are lost in the mail.

To order free Mathletics workbooks, please call the A's Community Relations Department at (510) 638-4900 x2329 or e-mail community@oaklandathletics.com. Please include the grade level and number of workbooks in your request.

You may also obtain workbooks online at www.oaklandathletics.com (click on "Community").

Mathletics is brought to you by



and



Adding up to make math and fun.



Community FUND

oaklandathletics.com



How to calculate a pitchers ERA



In baseball, a statistic called an Earned Run Average or ERA is used to track the average number of earned runs a pitcher allowed for every nine innings. The lower a pitcher's ERA, the less number of runs a pitcher has given up in the innings he has pitched. To calculate a pitchers ERA you multiply the total number of earned runs (ER) by nine and divide the result by total innings pitched (IP).

The equation is:

$$\frac{(ER) \times 9}{(IP)} = \text{ERA}$$

Sample Problem:

Justin Duchscherer gave up 3 earned runs in 12 innings pitched against the Boston Red Sox. What is Duchscherer's ERA against the Red Sox?

$$ER = 3$$

$$IP = 12$$

$$\frac{3 \times 9}{12} = \frac{27}{12} = 2.25$$

Duchscherer's ERA against the Red Sox is 2.25.

Players ERA Problems:

Greater than, less than or equal to (>, <, =):

1. **Dana Eveland's** ERA of 4.34 ____ **Sean Gallager** had 66 ER's and pitched 115.1 innings.

2. **Santiago Castilla** had 36 ER and pitched 36.1 innings ____ **Jerry Blevins** had 26 ER and pitched 63 innings.

3. **Joey Devine** has allowed 3 ER in 45.2 innings pitched ____ **Brad Ziegler** 1.06 ERA with 59.2 innings pitched.

Rewriting as mixed numbers

1. $5/4 =$

2. $11/6 =$

3. $7/4 =$

4. $10/4 =$

5. $9/8 =$

6. $22/6 =$

7. $19/6 =$

8. $45/12 =$

Multiplying by numbers

1. $5/8 \times 2 =$

2. $3/4 \times 3 =$

3. $2 \times 6/7 =$

4. $1/2 \times 5 =$

5. $10 \times 1/4 =$

6. $2/3 \times 9 =$

7. $5/12 \times 4 =$

8. $4/5 \times 80 =$



Order of Operations

(addition & subtraction)

1. $-9 + -4 =$

2. $-1 - -5 =$

3. $-6 + 10 =$

4. $5 + -11 =$

5. $20 - -10 =$

6. $-2 + -12 =$

7. $-17 + 26 =$

8. $26 - -15 =$

9. $-9 + -4 =$

10. $4 + -13 =$

11. $-6 - -20 =$

12. $-26 - -25 =$



Order of Operations No Exponents

1. $13 \times 24 + 24 =$
2. $12 + (6 \div 2) =$
3. $(11 \times 9) \times 4 =$
4. $16 \div 2 + 3 =$
5. $8 \div 2 \times 10 =$
6. $10 \times (7-3) =$
7. $5 \times 15 + (10 \div 2) =$
8. $7 \times 5 - (4+6) =$
9. $9 + 23 + (11-3) \times (4 \div 2) =$
10. $2 \times (6 \times 6 + 4) \times 5 + 6 =$
11. $21 - 18 - 6 \times 2 =$
12. $(16 \div 2 + 14) + 7 =$

Order of Operations with Exponents

1. $(5+7^2) \div 7 \times 7 =$
2. $(6^3-9-1) =$
3. $(3^2-3^2) + 5 =$
4. $6 - (8+3^3) - 4 =$
5. $(7+2^3) \times 9 =$
6. $2^3 \div (7 \div 7 \div 8) =$
7. $(2^3-9-8) \div 3 \times 3 =$
8. $(3+3 \times 6+3^2-3) =$
9. $(6+6^2) \times 3 =$
10. $(3+1) \times 8 \times 4 =$
11. $(7^3 \times 4) + 7 =$
12. $6^2 - 3 \times (3^2 \times 2) + 5 =$

Answer Sheet



Players ERA Problems:

1. _____
2. _____
3. _____

Rewriting as Mixed Numbers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Multiplying by Numbers:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Order of Operations (addition & subtraction)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

Order of Operations No Exponents

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

Order of Operations With Exponents

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

Name _____

School _____ City _____

Grade Level _____

CONGRATULATIONS!

Please fill out the voucher request form
on the back of the page.

MATHLETICS

OAKLAND ATHLETICS



NAME (PLEASE PRINT) _____

ADDRESS _____ CITY, STATE, ZIP _____

DAYTIME PHONE _____ E-MAIL ADDRESS _____

FOR CREDIT CARDS, PLEASE CIRCLE ONE: VISA MC AMEX DISCOVER CID# _____

CREDIT CARD # _____ EXP. DATE _____

NAME ON CREDIT CARD _____

OF TICKETS

2

PRICE PER TICKET

COMP PLAZA OUTFIELD VOUCHERS @ FREE = \$0

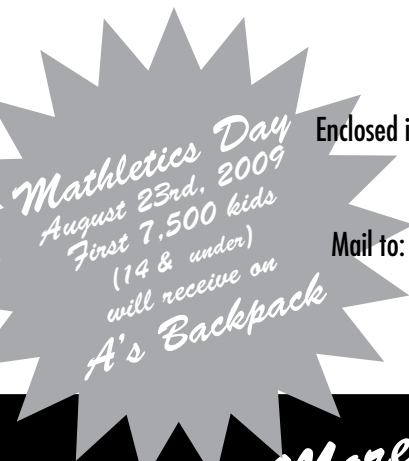
PLAZA OUTFIELD LEVEL VOUCHERS @ \$14.00 EACH = _____

ONE TIME HANDLING FEE @ \$4 (only if purchasing **extra** vouchers) _____

TOTAL _____

Enclosed is my check or money order made payable to the Oakland A's for \$ _____
ORDERED MUST BE REDEEMED BY MAIL

Mail to: Mathletics Program c/o Oakland A's, 7000 Coliseum Way, Oakland, CA 94621
Forms must be postmarked by Wednesday, July 1st, 2009
Vouchers will be mailed to the address provided on form.
Vouchers subject to availability. Please see vouchers for more details.



For More Information

community@oaklandathletics.com

510.638.4900 x2329



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