

Dear Reader

Welcome to *Figures*, our new monthly mathematics newsletter. We chose the name because it refers to numbers, but also much more: there are geometric figures, historical figures, figure drawing and figure skating, and especially thinking (it figures!). Our goal is to provide you with information that is as timely and useful as possible, aimed at the entire Pre-K through 12 New York City mathematics community. Plus we'd like to provide you with food for thought, including a puzzle every month (with the answer published the following month). In coming months we'll be expanding our coverage and would like your input as to how best to meet your needs. Please write us at rschwarz@schools.nyc.gov with any questions, comments or suggestions.

Upcoming Workshops

Our department is offering numerous mathematics workshops in the next several months. Here are the details:

Elementary Schools

Professional Development on *Everyday Mathematics Elementary Schools* / Three Offerings / from mid-October

The Department of Mathematics announces three professional development opportunities related to the use of *Everyday Mathematics* 3rd Edition. These include: 1) "An Overview", designed for Pre-Kindergarten teachers, half-day sessions on **October 17**, including important information about using instructional resources, pacing, and selecting activities; 2) "Supporting Teachers", designed for new math coaches, full day sessions in **mid-October**, covering key components of the Classroom Resource Package, and; 3) "Taking a Deeper Look at the Assessment Components", designed for K-5 math coaches, on **November 6**, covering the new assessment components of the text and monitoring student progress. Registration for these programs must be completed on Protraxx at <http://pd.nycoit.org> and paid for on FAMIS. For more information on these sessions, including a link to registration, please contact Lisa Emond at lemond@schools.nyc.gov.

Academic Intervention: Embedded Interventions on the Elementary School Level (*Everyday Mathematics Program*)

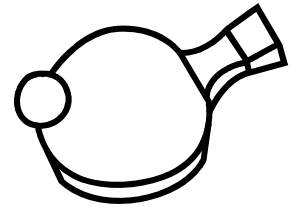
Elementary Schools/ Deadline: October 16/ Event: October 18

This workshop will provide a range of intervention activities provided within the *Everyday Mathematics* Program. It will be held at Access HS, 500 Eighth Avenue and W. 35th (...continued on page 2)

Puzzle of the Month

Ping Pong

Ten ping pong balls are numbered from one to ten. If pairs of the balls are drawn at random, what is the most likely sum of the numbers on the two balls?



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Street, 11th floor, from 9:30 a.m. to 11:30 a.m. To register, please e-mail ccooper@schools.nyc.gov. Kindly provide your name, school, school phone, and an evening phone number. The fee for this workshop is \$20 and payment can be made through the FAMIS system by entering Item Number TL1001005, Contract Number TL10010, Vendor ID TL1001000.

Middle Schools

Mathematics workshops on Exemplars (Level 1)

Middle Schools / Event: November 6

Level One *Exemplars* Professional Development will take place on Tuesday, **November 6** from 8:30 a.m. to 3:00 p.m. for teachers, math coaches, lead math teachers and administrators on the middle school level at a site to be determined. Schools who send participants will receive a site license for the *Exemplars* materials. Participants will be introduced to models of effective analysis of students' mathematics work. Analysis will be based upon holistically-scored student work samples correlated to middle school mathematics. Registration for this program must be completed on Protraxx at <http://pd.nycoit.org> and paid for on FAMIS, item number TLMATH000. For additional information contact Elaine Carman at Ecarman@schools.nyc.gov.

Mathematics workshops on Exemplars (Level 2)

Middle Schools / Events: November 17, December 8 and January date TBA

Level Two *Exemplars* Professional Development will take place on **November 17, December 8** and a date in **January** to be announced, from 9:00 a.m. to 3:00 p.m. at a site to be determined. In order to participate in this series, participants must have participated in the Summer 2007 or November 6 Level One *Exemplars* professional development. Participants in this series will continue to explore the use of *Exemplars* to reinforce the mathematics instruction at the middle school level. Student work samples correlated to grades 6, 7, and 8 will be investigated. Additional training will include the examination of the work of the participants' students and the development of instructional plans based upon the work of individual students. Work will focus on intervention strategies to complement the instructional model. Registration for this program must be completed on Protraxx at <http://pd.nycoit.org> and paid for on FAMIS, item number TLMATH001. For additional information contact Elaine Carman at Ecarman@schools.nyc.gov.

The middle school catalog of professional development may be found at <http://schools.nycenet.edu/cityhallacademy/mspdcatalog.pdf>

Workshop on Using Released Test Items to Improve ELL Achievement

Middle schools / Event: October 18, December 20, February 14

Middle school teachers of ELLs can attend a three-part workshop on how to identify the language and cognitive demands of the State mathematics assessment at different strands and at different grade levels. Participants will receive the information and learn the skills necessary to interpret released test items, using them to maximize ELL achievement. The workshop will be held **October 18, December 20,**

and February 14, 8:00 a.m. – 3:00 p.m.. To register, visit <http://pd.nycoit.org>. To download a flyer for your school or network, visit http://schools.nyc.gov/NR/rdonlyres/91284FE6-A592-4ECC-B556-EAA2FCD8D6C5/26123/ReleasedTestMathFlyer_9_26_07.pdf. Confirmed registrants will be e-mailed the institute's location. Participants must attend all three sessions. The cost is \$225.00 (FAMIS#: TLELL0032) per participant. For more information, contact Dionisio Rodriguez at DRodrig10@schools.nyc.gov or (212) 374-6673.

Institute on Applying QTEL Strategies to IMPACT Mathematics

Middle schools / Event: October 24 or November 3

Middle schools can send teams of one math teacher of ELLs and one coach to a five-day institute on using IMPACT lessons enriched with Quality Teaching for English Learners (QTEL) scaffolding principles. QTEL-trained math leaders will showcase lessons as exemplars for further professional development in mathematics at the school level. Participants field test and refine lessons, creating professional networks where scaffolding mathematics instruction for ELLs is implemented according to the guiding principles of the QTEL institute. The institute begins **October 24 or November 3**. Sessions will be held 8:00 a.m. – 3:00 p.m. To register, visit <http://pd.nycoit.org/>. To download a flyer for your school or network, visit http://schools.nyc.gov/NR/rdonlyres/91284FE6-A592-4ECC-B556-EAA2FCD8D6C5/26122/QTELImpactMathFlyer_9_26_07.pdf. Confirmed registrants will be e-mailed the institute's location, and participants must attend all five dates. The cost is \$375.00 (FAMIS#: TLELL0030 [Cohort 1] and TLELL0031 [Cohort 2]) per participant. For more information, contact Dionisio Rodriguez at DRodrig10@schools.nyc.gov or (212) 374-6673.

Academic Intervention: Embedded Interventions on the Middle School Level (Impact Mathematics Program)

Middle Schools/ Deadline: November 4/ Event: November 6

This workshop will provide a range of intervention activities provided within the Impact Mathematics Program. It will be held at Long Island University, 9 Hanover Place, Brooklyn, from 9:30 to 11:30 a.m. To register, please e-mail ccooper@schools.nyc.gov. Kindly provide your name, school, school phone, and an evening phone number. The fee for this workshop is \$20 and payment can be made through the FAMIS system by entering TL1001001, Contract Number TL10010, Vendor ID TL1001000.

Future City Regional Competition

Middle Schools / Deadline Oct 15 / Event: January 19

The Future City Regional Competition, a national program sponsored by the engineering community to promote technological literacy and engineering to middle school students will be held at the Polytechnic University on **January 19, 2008** with the national finals taking place in Washington, D.C. This program fosters an interest in math, science, and engineering through hands-on, real-world applications and is open to all middle schools. Schools interested in registering can find information and application forms at <http://www.futurecity.org/competition.shtm> Schools wishing to

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register for the competition must complete the application by October 15. The \$25 registration fee will be waived for those schools with greater than 70% of the students receiving free or reduced lunch. For additional information contact Elaine Carman (ecarman@schools.nyc.gov) or Dr. Noel Kriftcher at Nkrift@duke.poly.edu

Interactive Learning in Mathematics Workshop Series Middle Schools / Deadline Oct 23 / Events

The NYC Department of Mathematics is pleased to announce three series of professional development workshops emphasizing interactive learning in the mathematics classroom, designed for middle school math teachers, coaches, and assistant principals. Workshop participants will explore a wealth of hands-on and minds-on activities which are designed to make mathematics 'come alive'. Moreover, these strategies will help teachers prepare their students for the middle school NYS math assessments. Training will be offered at The Dr. Charlotte K. Frank Mathematics Education Center, located on the campus of the City College of New York, NAC Bldg.- Room 3/218 from 9 a.m. to 3 p.m. Registration for these programs must be completed on Protraxx at <http://pd.nycoit.org> and paid for on FAMIS. The deadline for registration is October 23. For dates and further information, please contact Dr. William Farber at (212) 650-5090 or WFarber@schools.nyc.gov

High Schools

Integrated Algebra Workshops (Two Series):

**High Schools / Deadline: Oct 16 / Events: Saturdays
October 20, 27 November 10**

**High Schools / Deadline: Oct 23 / Events: Tuesdays
October 30, November 13, 27**

The NYC Department of Mathematics is offering two three-day series of professional development workshops on *Integrated Algebra*, designed for high school math teachers, coaches, and assistant principals. Participants will explore the wealth of ancillary materials which accompany the new Integrated Algebra book, including transparencies, graphing calculator resources, class sets of manipulatives, Spanish-language materials, review book, workbooks, assessment options and especially the new online resources, plus ExamView, TeacherExpress, and other technology that is now a part of daily instruction. To make maximum use of the software available, participants should bring a laptop computer. Training will be offered at The Dr. Charlotte K. Frank Mathematics Education Center, located on the campus of CCNY, in the NAC Bldg.- Room 3/218 from 9 a.m. to 3 p.m. each day. The cost for each three-day workshop series is \$225 per participant. Seating is limited to thirty (30) participants. Registration for these series must be completed on Protraxx at <http://pd.nycoit.org> and paid for on FAMIS (Saturday series: item number TLMATH010; Tuesday series: item number TLMATH011). Saturday sessions are on: **October 20, October 27, and November 10**; Tuesday sessions are on: **October 30, November 13, and November 27**. For additional information about the Saturday series contact Miguel Cordero at (212) 374-0368 or mcordero@schools.nyc.gov and about the Tuesday series, contact Dr. William Farber at (212) 650-5090 or WFarber@schools.nyc.gov

Preparing for 2008: New High School Geometry Course

On Election Day November 6, 2007 the NYC Department of Education will be hosting a full-day citywide conference for math educators on the new high school geometry standards. Just as the new Integrated Algebra exam (and course) are replacing Math A, Math B will in turn be phased out and replaced by new exams and courses: Geometry (beginning September 2008) and Algebra 2 and Trigonometry (beginning September 2009). Although geometry topics have been taught in Math A and B (and Sequential Math before them), there has not been a complete Geometry course in NYC for more than 30 years. To maximize student achievement, teachers must begin now preparing for the challenges of this course. This full-day event inaugurates our city-wide effort to prepare high school math teachers for these changes and is **free of charge** (although pre-registration is required and each school is limited to sending two representatives). Registration for this conference must be completed on Protraxx at <http://pd.nycoit.org> Besides workshops, we will be offering a Geometry Curriculum Showcase, at which various publishers will have an opportunity to present their materials to educators from the hundreds of high schools we are inviting. Unlike Integrated Algebra, there will not be a single citywide core curriculum in Geometry: instead, we envision two or three recommended curricula that schools can choose from and for which pacing calendars and summer professional development would be provided.

We will have further information in the November issue of *Figures*, as well as a listing in an upcoming Principals' Weekly. For further information, contact Miguel Cordero at mcordero@schools.nyc.gov or call (212) 374-0368.

New Pacing Calendars Online

Teachers can access all of our pacing calendars, including those for the new third edition of *Everyday Math*, *Impact Math*, the two-semester and four-semester (in draft) sequences for Integrated Algebra and a calendar of *Geometer's Sketchpad* activities correlated to Integrated Algebra. These are accessible however only from the Department of Education intranet, i.e., a school computer connected to the MetroTech server:

<http://www.nycboe.net/AdminOrg/Offices/TeachingLearning/math.aspx>

Core Curriculum Materials

By now your school should have received all of the mathematics core curriculum materials which have been ordered. Should there have been any problems with ordering or delivery, please contact the Core Curriculum Team at 718-935-3334.