



News You Can Use

February 2010

The CPM Educational Program Newsletter

Application process now open for CPM Summer Assessment Seminars

- Three one-week sessions, limited to 30 teachers each

CPM is beginning intensive work reviewing and editing its assessment materials as well as creating new and varied assessment items. This summer we will convene three, one-week assessment work sessions for interested CPM teachers to address the question: What constitutes quality assessment? Teachers will have the opportunity to examine student work, discuss various types of scoring, and explore ways to make assessment items beneficial to both students and teachers. These sessions will be held June 21 - 25 in

Denver, CO for those CPM teachers who live in the Central and Mountain time zones, July 12 - 16 near the Baltimore/Washington Airport in Maryland for those in the Eastern time zone, and July 19-23 in Sacramento, CA for those in the Pacific time zone.

The week will be valuable professional development for any teacher who wishes to better understand, create, and use varied

methods of assessment. Participation is by application and each site will be limited to 30 teachers. If you are interested, please read all of the details and requirements posted at <http://www.cpm.org/teachers/apps/SAS.htm>. Then complete the online application. **The deadline to submit an application is March 7.** Participants will receive a stipend of \$700 for the week, plus up to \$300 reimbursement for air travel or \$75 for commuting by car. CPM will also pay for your hotel room, breakfast, and lunch each day.

CPM kicks off assessment initiative

Last year CPM created web-based assessment resources and a test generator. This year kicks off a two-year initiative to improve both the assessment resources available to teachers and how they use them. A new web site offers teachers the opportunity to share samples of student assessment work. This site will allow teachers to engage in dialogue about the effectiveness of these items and discuss what they reveal about student understanding. CPM is conducting three Summer Assessment Seminars (SAS) around the country in June and July. Teachers will have the opportunity to consider what constitutes effective assessment, evaluate student work, and create some new assessment items for the CPM courses. See the related articles about assessment dialogue and the summer seminar application process to become involved with improving assessment.

Starting an assessment dialogue: Submit student work for discussion

Consider the following question from the MCAS (the Massachusetts Comprehensive Assessment System) 7th grade math test in 2002:

Dolores bought a package of corn seeds. She wanted to use all the seeds in the package to plant two or more rows of corn with the same number of seeds in each row, but she found that this was not possible. Which of the following could have been the number of seeds in the package?

- a. 32 b. 33 c. 35 d. 37

This problem caused quite an uproar in the State. Can you figure out why? In the sixth grade curriculum in Massachusetts, students learn that a row can consist of only one plant, and thus any of these answers was possible, even (d), the intended answer. Dolores could plant 37 rows of one seed, thus fulfilling

the conditions of the problem. The state, however, had planned on 37 being the only answer. Wilfried Schmid, a Harvard University mathematics professor spoke up for the state, saying that 37 rows of one seed is really just one row of 37 seeds, so

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Chris's Corner:

A view from the classroom

Cognitive demand is the depth of knowledge, that is, the level of thinking about and working with information, required for a student complete a task. Bloom's Taxonomy is an example of levels of cognitive demand. (See related article about questioning.) When a lesson is modified, the changes can increase OR decrease the cognitive demand of the lesson. This is why it is important that teachers be purposeful about the reasons for modifying a lesson. Questions to consider are: Why do I need to modify this lesson? Is it to save time? Is it to challenge the student? Am I lowering or raising the cognitive demand of my students with this modification in the way that I want?

For example, omitting some information can raise the demand and have students think of different ways to solve a problem. Consider problem 3-32 in *Geometry Connections* about the length of George Washington's nose. The problem could be written so that students have three pieces of information: On a picture of Washington's head his face is 12 inches long and his nose is 4 inches long. If Washington's face on Mount Rushmore has a length of 60 feet, find the length of his nose there. In this case, a simple proportion will solve the problem. However, the text raises the cognitive demand by posing the problem this way: On Mount Rushmore, the face of George Washington is 60 feet long. How long is his nose? Now students must think creatively to devise one of several possible strategies to solve the problem, not the least of which is gathering additional data. The caveat here is that when you choose to modify a lesson, make sure you are clear about why you are doing it and how the problem's cognitive demand will change.

Leslie Dietiker, CPM's Director of Curriculum, presented a session about cognitive demand in problems at the 2008 CPM Summer Conferences. For more information about this session (titled "Lesson Modification") and others, as well as the CPM sessions offered at other conferences, go to http://www.cpm.org/teachers/CPM_conf_resources.htm.

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Textbook & Curriculum Updates

Making Connections: Foundations for Algebra, Courses 1 and 2 on track for June release

The first half of each new middle grades course has been revised on the basis of field-test teacher feedback and final editing will be completed by next month. The managing editors will work in March and April to complete the revisions to the second half of each book. Several editors have read the books to be sure that all of the corrections have been made, problems have been edited for clarity, and readability has been smoothed out. We are also working to complete the web-based assessment files, the *Extra Practice* booklet, and *Parent Guides* so that they are available by summer. Hotmath will start working on solutions this spring to be sure that this resource is ready for the start of school. Sites that ordered these courses last summer and fall should begin receiving the replacement books in late June or early July. Anyone who intends to order one or both of these courses using 2009-10 funds and must have delivery by June 30 should get a purchase order to CPM by the end of May, sooner if possible.

Foundations for Algebra: Years 1 and 2

We will continue to support FFA with the current printed and online resources for several years. The only exception will be hardbound books. If you need to reorder hardbound texts, we need your order as soon as possible. **This year will be the last time that we do a press run of hardbound books.** Thereafter, the softbound sets will be the only student version available once the hardbound books sell out.

Differentiating the Curriculum for Honors Students

There is not much in teacher training and classroom experience that prepares teachers to teach a class of gifted students. My site already uses *Algebra 2 Connections* for regular Algebra 2, so when I was assigned to teach the honors class, I started reading articles and attending classes to learn more about working with gifted students.

In my coursework I learned about four components that helped define the structure of my “new” classroom to provide students with advanced learning opportunities: acceleration/pacing, depth, complexity, and novelty. My students were already accelerated by grade level, with sophomores in Algebra 2. This group allowed me to keep pace with the suggested timeline as written in the teacher edition and to complete all of the problems in each daily lesson. Depth and complexity are closely linked in my classroom. Having a student “go deeper” into a topic requires him/her to uncover more details and new knowledge about it. Such probing adds complexity that encourages students to recognize relationships among ideas and connect them to other concepts.

Spanish student books for *FFA 1* and *2* and *Math 2*: FREE!

The *Math 1* Spanish student sets are out of print. We have about a thousand each of *FFA 1 & 2* and *Math 2* Spanish sets in the warehouse and we will be removing those titles from our price list this year. Any teacher or school may request reasonable quantities of these titles at no cost for the books and pay only for shipping, which is \$2.00 per set. That’s all you pay for the books. Contact the Business Office—email george@cpm.org or call Jill at (916) 681-1311—to order these titles. Note that Spanish editions of *Algebra Connections* and *Geometry Connections* will continue to be available for several years.

Web-based assessment resources: All courses

The web-based assessment resources for *Algebra Connections*, *Geometry Connections*, and *Algebra 2 Connections* are complete and operational at <http://assessment.cpm.org>. All of the test items and pre-made quizzes and tests for these courses that are on the respective assessment CDs are located there. The Geometry items have been polished and sets of pre-made tests were created last fall for each chapter. These courses are supported with a test generator that allows you to select the topics you want on a test, then select the items, and download a Word or open source file that, once formatted, is ready to print for your classes. We have also smoothed out most of the technical “bumps” in the system. Carol Cho, our Technology Coordinator, has posted frequently asked questions and troubleshooting steps should you encounter some common

see TEXTBOOK, cont. pg. 7

I added depth and complexity to my classroom in two different ways. First, I added “big problems,” investigations, and projects to my course requirements from various CPM resources that are closely aligned with the current chapter I was teaching. Second, I increased the cognitive level of my questioning. I prepare for class by prewriting questions for the lesson, then rewriting them to “level them up” to challenge students about that day’s class work. (See the “questioning skills” article for references to cognitive levels and questioning.) “Leveling up” means reviewing each question, determining its cognitive level, and then rewriting it as necessary so that it requires the students to think at a higher cognitive level when they respond to that question.

Finally, novelty is student-initiated and highlights a student’s nontraditional approach to seeing new implications and making conjectures in completely new ways or by reorganizing knowledge. I rely on the projects and my questioning as the vehicles for students to convey new or reorganized knowledge. To appropriately differentiate the curriculum requires the teacher to meet the student where s/he is. Supporting students in gifted classes takes reflection and planning to meet their needs every bit as much as planning for other groups of students.

Article contributed by: Melissa Thomley, Verona, WI

News Bytes

Resources by course at the CPM web site

Teachers are reminded that there are substantial resources that support each course available at the CPM web site: <http://www.cpm.org/teachers/resByCourse.htm>. If you have not been there, we suggest that you take five minutes to see what is there.

Ordering textbooks with 2009-10 funds

If you are going to place an order this spring and use money from this fiscal year, especially if you must receive the books by June 30, **please advise our business office that you expect to order** and tell us how many of which titles and binding you need. We go to press in the spring and want to be sure that we have what you need on hand by June. Send an email to george@cpm.org or call Jill at (916) 681-1311.

Summer workshops

We will begin posting workshop sites for Summer 2010 in March and hope to complete most of the list by late April. Go to www.cpm.org/teachers/workshops.htm for the latest information. We will not hold workshops for fewer than 10 teachers, so early registration is the best way to help keep a site open.

Hotmath offers free Catchup Math Trial

Hotmath asks all CPM teachers to visit the new Catchup Math website (catchupmath.com) for struggling students in Pre-algebra through Algebra 2. Catchup Math is an online, personalized assessment and remediation service where students take brief quizzes to identify learning gaps, and then receive immediate online remediation through lessons, videos, CPM activities, and practice problems. Catchup Math also includes practice with basic skills such as adding fractions. Teachers receive online reports about student effort and progress. Catchup Math costs less than \$5 per student per year. **All CPM teachers may request a free 30-day, school-wide pilot by emailing lincoln@hotmath.com.**

Webinars are coming

The Directors and Regional Coordinators of CPM have been researching and discussing the introduction of webinars for the past year. While we remain committed to having face-to-face workshops whenever possible, especially for most of the summer course workshops, we realize that we need to offer alternatives for those who are unable to get released-time from school or for those who do not have access to them within reasonable distance. Likewise, courses for which teachers are spread across the country, such as *Pre-Calculus* and *Calculus*, can be better served with webinars. CPM will also be able to do topical webinars that focus on specific issues like questioning strategies, study team management, and closure.

CPM has selected *Illuminate* as the means for teachers to participate in webinars. Chris Mikles (Director of Teacher Education) and Carol Cho (Technology Coordinator) are working on the technical and content issues related to producing webinars. For teachers who cannot participate in these sessions live, all of CPM's webinars will

be archived and available for viewing (but without the interactive feature) at any time after the live session. We may offer one or more general sessions this spring, and we will have webinars available for selected courses and topics during the summer and fall. We will announce the sessions and the schedule at our web site on the workshop page as well as by mail as soon as the dates are set.

Improving your questioning skills

I work with several teachers in my role as math coach at my school in the Los Angeles Unified School District. However, any two teachers could work together to give each other feedback about questioning using the following process. One teacher visits the classroom of another for an entire period and charts every question that the teacher asks. First chart the question by type according to Bloom's Taxonomy* (knowledge, understanding, application, analysis, synthesis, evaluation), record the "wait time" that the teacher gives the student to respond, and the student's response. Does the student respond with "yes" or "no," give full sentence answers, or have no response at all? Also check to see if the teacher answers his/her own questions for the student.

Sometime soon after observing the class, have a debriefing session with the teacher. Review and sort the questions according to Bloom's Taxonomy chart to see the types of questions the teacher is asking. Discuss the various cognitive levels of the questions and what "key" words the teacher can use in these questions to promote greater thinking (see reference below). Use the student responses to help evaluate the effectiveness of the questions that were asked with respect to engaging the student in thinking and learning. Spend a short time revising a few of the questions that were asked so that they reflect a higher cognitive challenge for students.

Once teachers are aware of the cognitive levels of questions and the verbs that cue them, they can use them to develop "pocket questions" for future lessons. These questions are "scripted" ahead of time for places in a lesson where the teacher anticipates that students will need some guided assistance. The teacher must complete the lesson personally in advance of class to become familiar with all aspects of the lesson in order to anticipate where the challenges lie and where the students will need assistance with directed questioning. Anticipating challenging areas of the lesson can help the teacher prepare these questions ahead of time and actually put them in his/her "pocket" to use as needed. This preparation is an extremely important step to help teachers improve the quality of their questions and thus student learning.

Once you have established the practice of working with each other or your math coach to improve your questioning strategies (and other areas of teaching as well), the two of you should spend some time doing lesson planning together so that you can discuss possible questions to use that challenge students to think at higher levels. You can use the internet to search for more articles about

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Ask a CPM Teacher

This feature is new this year. Between issues any CPM teacher may submit a question for the next issue or offer suggestions to answer the “next issue” question(s) that appear at the end of this section. Your participation is needed and we hope that we can share a variety of answers for your specific questions/concerns. Email a question and/or your responses to the next issue question at the end of this article to the “Ask a CPM Teacher” editor, Tracy Frank at frank@cpm.org.

"What types of team assessments do you give that really encourage and push teams to work together and strengthen individual understanding? How do you grade them?"

- I use **formative team assessments** that I call timed progressive problem-solving. The activity is modeled on the “around-the-world” study team strategy. Each team is assigned a different color marker to write with and starts with one problem. The teams work until I call time (one to five minutes depending on complexity), then pass the problem to the next table. The marker in each team is given to another team member. Next, teams review the work on the paper they receive and either agree with the work or make corrections to it, then add whatever they can to the solution if and as necessary. Continue this activity by either continuing to pass the papers to another team or have each team start another problem. I also use **summative team assessments** where everyone in the team works together to solve problem(s), but each student writes his/her own paper and is graded only on their work.

Debi Dennis (Middleton, WI)

- The easiest and most frequent team assessment I do is to use the CL (closure) problems at the end of each chapter as a “quiz.” I have the students rotate their papers to another student after each problem (and if the subproblems a - b- c... are problems unto themselves, I let them rotate after each of them). This way, no one can really go ahead because their work for the next problem goes on someone else’s paper. In addition, they have to check the last person’s work before they begin the next problem. At the end of class I collect only one paper from each team. It is hard to argue that the quiz is unfair because everyone has written on each paper and had the opportunity to review and correct the work of others in the team. Depending on the class and time of year, I may also do a participation quiz concurrently.

Kathy Borst, (Boonville, CA)

- Regardless of the content of the team assessment itself, I grade both the work they produce and their participation during the quiz. I tell the teams that I will observe and record the degree of participation by each student. I collect four papers clipped together that should show the same answers and work, and then grade one paper chosen at random. Everyone receives the same base grade, perhaps out of 20 points. Then I ask them to split an additional 15 points (something that four does not divide evenly!) between the members of their team—no fractions allowed—and justify who should get how many of these points. I collect this information and put it with my observations. If the team score is 18, person A could have 23, B 25, C 19, and D 20. (15 extra points were available.) Each individual is recognized as well as the team. The total points are not going to significantly change any grades, but the dual emphasis on the questions and their participation really does get them involved with the quiz. No one complains...

Kaye Whitney, (Benicia, CA)

- Although individual tests are cumulative (about one-third new questions and two-thirds review questions), I use Study Team Tests as an opportunity for students to “process” all the new material with each other one last time. Team Tests are almost entirely “new” problems. My Team Tests have much more challenging and thought-provoking questions than individual tests. They usually do not contain “exercise” or “algorithm” type problems. When I have the energy to create them, I make four versions so that each person in the team gets a different team test. The problems are the same with the numbers changed. That way students must discuss the ***process*** of solving in their teams, but cannot just copy solutions from each other. I usually rotate grading, such as Problem #1 on Student #1’s paper, Problem #2 from Student #2,..., Problem #5 for Student #1, etc. Then I total all of the points for the team and everyone gets the same score. Obviously they do not know in advance which problem I am grading on which paper. That way, each team member is contributing to the team score (as opposed to grading one random paper in the team, and then everyone getting the score of one student). Sometimes I do not grade team tests at all; just the process of working in teams (and not knowing in advance whether they are getting graded or not) is enough to promote serious effort during these reviews. Note that I do not think it is fair to negatively impact an individual student’s course grade based on Team Tests. They are, after all, a ruse of sorts to encourage extra effort while students revisit the ideas in the chapter. Overall, the Team Tests count for very little – up to 5% of the overall grade, and in most cases these grades increase the final average of each student. (HW is 10%, Individual Tests 85%, Team Tests 5%).

Michael Kassarijan, (Irvine, CA)

Editor’s note: Team quizzes and tests help students with motivation to focus on the problems and are designed to be another opportunity to learn and consolidate ideas from the course. The Assessment Handbook in the *Connections* teacher editions discusses grading them and offers two pages of suggestions. No student should be penalized for the work of other students or lack of participation by their peers. When a single quiz from a team does not represent the work of the team, another paper should be graded.

Next Issue’s Question: How do you use questioning to differentiate (provide support for students who need it and depth for those who are ready) in your classroom?

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Bloom’s Taxonomy and other sources that discuss cognitive levels with respect to questioning. It should not take long to improve the quality of your questions by referencing the lists of verbs that cue students to the type of response you expect from thoughtful, well-crafted questions on your part.

*See <http://www.officeport.com/edu/blooms.htm> for a chart that shows the hierarchy of cognitive levels of questions. (Only the fourth link there is active, but it has concise explanations of the levels and some sample questions with analysis of them.) We cite Bloom’s Taxonomy because it illustrates different levels of cognitive demand along with samples of verbs for each level. Considerably more work has been done in this area. See <http://education.stateuniversity.com/pages/2475/Taxonomies-Educational-Objectives.html> for an overview and additional references for taxonomies.

Article contributed by: Reynold Worch,
World Famous Hollywood High School, LAUSD, CA

Best practices and the Marzano instructional strategies

In recent years several state and district adoption processes have asked if our course materials reflect the “Marzano instructional strategies.” Actually, the “Essential Nine” that Robert Marzano and his co-authors describe in *Classroom Instruction That Works* (2001) have been important elements of the CPM courses since their inception in 1989. The original CPM courses were spawned by the work of various educators in the 1980’s that emphasized teaching problem-solving strategies in the context of problem-based learning. The five *Connections* courses represent refinements and extensions of the original CPM principles. Below is the list of the nine essential strategies and how, in part, they connect to the CPM program.

1. Identifying similarities and differences. The investigations that comprise the conceptual development part of the lessons in CPM texts frequently use this strategy to see both the parts that make an idea unique as well as how it connects to other ideas in mathematics.

2. Summarizing and note taking. The “Learning Log” entries regularly ask students to pull together their work in their own words. Chapter summaries and tool kits help students develop an organized study resource. Students have a regular chance to process the work of each lesson during closure activities (see each Teacher Edition’s lesson notes) and in each chapter’s closure section.

3. Reinforcing effort and providing recognition. The use of study teams and the team roles gives every student some responsibility for the lesson. Teacher circulation among the teams affords regular opportunities to reinforce positive outcomes and redirect efforts that are off track.

4. Homework and practice. The “Review and Preview” (homework) section in each lesson gives students problems that are designed for success while they practice several ideas from the lesson and previous work. The length of each assignment has been carefully monitored in field-testing so that it can be completed in a reasonable amount of time.

5. Nonlinguistic representations. Wherever possible, the texts make use of multiple representations and modeling of ideas to make abstractions visual. Generic rectangles, the Giant One, and various “webs” (such as linear, quadratic, and fraction/ decimal/ percent) help students to “see” the math.

6. Cooperative learning. The use of study teams is one of the three research-based principles of CPM. Their effectiveness has been strengthened by the addition of team roles. The work in teams allows students to become familiar with ideas before they are formalized (including the introduction of math terminology) and to have dialogues with each other about the mathematics. Their structure gives students a consistent framework (and ready support) for completing each lesson.

7. Setting objectives and providing feedback. Chapter objectives are stated at the beginning of each chapter. Each lesson has an introduction of the topic and connects the new work to past topics. The teacher’s lesson notes have numerous suggestions as well.

8. Generating and testing hypotheses. Making and testing conjectures is a regular part of the developmental lessons, usually followed by having the students justify what the students think is true or false.

9. Cues, questions, and advance. The “lesson notes” and the professional development support at the CPM workshops help teachers expand their repertoire of strategies to engage students in their learning and understanding mathematics.

During the past decade, Marzano has refined and extended the ideas that he presented in this book. He has co-authored several books and numerous articles that discuss aspects of his ideas. He has also commented about what his writings do not mean. A Google search will help you find them.

For an expanded description of the “Essential Nine,” see **Getting Acquainted with the Essential Nine**, Laura Varlas, [ASCD Curriculum Update](http://manila.esu10.org:8000/tlw/Theessentialnine.pdf), Winter 2002. manila.esu10.org:8000/tlw/Theessentialnine.pdf.

For the book itself, visit <http://www.mcrel.org/product/19>. Also available from Marzano, et al:

- Classroom Instruction that Works with English Language Learners
- Using Technology with Classroom Instruction That Works

For Marzano’s response about misinterpreting what he has said, see the [Phi Beta Kappan](http://www.phibetakappan.org) article published September 2009, “Setting the Record Straight on ‘High Yield’ Strategies,” at <http://www.highbeam.com/Phi+Delta+Kappan/publications.aspx?date=200909>

Visit http://www.tltguide.ccsd.k12.co.us/instructional_tools/Strategies/Strategies.html for suggestions for using technology for each of the principles on Marzano’s original list.

California Corner

You might call this article, “California Math Curriculum, Round 3.” After two revisions to various curriculum policies in the two 2009 budget revision settlements, including suspending the Curriculum Commission for at least four years by defunding it, curriculum and adoption plans have changed again! The recent “Race to the Top” compliance legislation includes rewriting the CA math standards by July—this July. If there is funding, work will begin in May. This money will revive the Curriculum Commission and fast track the revision of the CA Math Framework by July 2011. The Framework process will use the reports of the Math Framework focus groups from last spring and the list of Framework Committee applicants from last summer. Publishers will have six months to have submissions ready for February 2012 delivery, with reviews of these submissions completed by May and a State Board of Education vote by July 2012. English/Language Arts will take nine months longer, finishing in the spring of 2013. What this will mean for district reviews and adoptions, to say nothing of funding textbooks, remains to be seen. All we can say is that we will have the next update for you in the May newsletter.

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the state's answer was correct and should not be thrown out. "If you plant 37 rows of one, a person with common sense would still say that is one row. That's why I think this is just silly," he said.

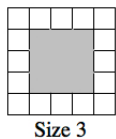
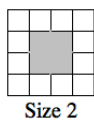
Are issues such as the ambiguity of the above item avoidable? Can a perfect assessment item be created? How can teachers make the most out of different assessment items? CPM would like to help teachers answer these questions as well as investigate assessment beyond the multiple choice format at three Summer Assessment Seminars. (See the related article for more information and the link to the application web site.)

To begin the assessment discussion, we would like teachers to try out some problems with their students. Please do not attempt to "teach" these problems, but rather, give them to your students without any preparation. There is no need to give them all of the problems; one problem would be sufficient, but feel free to try more if you have time. We would like to post sample student responses so that other teachers can examine and discuss them. What is it we learn about the student's understanding from this particular response? Can we determine the student's progression to mastery of certain skills? What does the solution tell us about his/her problem solving skills? We hope you will try a problem or two and send in student responses. When problems are posted the teacher and student will remain anonymous. You can email student responses to Carol Cho at cho@cpm.org for uploading. Student responses can be viewed at <http://picasaweb.google.com/CPMeducational>.

The following problems are adapted from the new national core standards. If you change the problem, please indicate what you changed before uploading any student work. Please do not upload all of the student work. Choose samples that will foster discussion or for which you have particular questions.

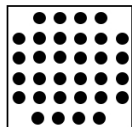
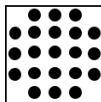
1. Barty says "The sum of any n consecutive integers is divisible by n ." Is Barty correct? Is this always true for any value of n or for only some values of n ? Explain completely, justifying your statements.

2. Hydra makes and sells mirrors. She makes a frame for each mirror by using small square ceramic tiles surrounding the mirror. Write an expression for the number of tiles Hydra will need to make a border for a size n frame.



3. Use the figures below to show and explain why the two expressions are equivalent.

$$(n + 2)^2 - 4 \text{ is equivalent to } n^2 + 4n$$



4. According to *Runner's World* magazine, *On average the human body is more than 50 percent water. Runners and other endurance athletes average around 60 percent. This equals about 120 soda cans' worth of water in a 160-pound runner!* Check out the *Runner's World* calculation. Are there really about 120 soda cans worth of water in the body of a 160-pound runner? Here are some facts:
 - A typical soda can holds 12 fluid ounces.
 - 16 ounces (one pint) of water weighs one pound.Show all of your work and explain your reasoning.
5. A doctor orders medicine for a child who weighs 9.3 kg. The child must receive 25 mg of the medicine for each kilogram of body weight. The pharmacy stocks the medicine in a concentration of 250 mg per 5 ml. How many milliliters of the stock medicine should the child receive?
 - Estimate the answer mentally. Justify approximations you make.
 - Compute the answer to the nearest tenth of a milliliter and show how you get your answer.

TEXTBOOK, continued from pg. 3

difficulties. Other than some programming bugs on our end, now resolved, most of the issues involve the version of Word and/or the type and age of the printer that teachers are using. The suggestions help you get around most of the issues. If you do have difficulties or a question, email Carol at cho@cpm.org.

The *Pre-Calculus with Trigonometry* and *Calculus* assessment resources are also available at this web site, but they are not tied to the test generator. The *Making Connections 1 and 2* preliminary assessment resources are available this year, but expanded, polished, and reorganized chapters of resources will be completed by this summer to match the final first edition of the courses (available by the end of June). These courses will include the test generator feature.

When you go to the assessment site for the first time, be sure to follow the directions to register CAREFULLY. Doing so will make your registration successful and save you time in the long run. Be sure to click on "First time User?" to start, then enter the username **firstuser** and the password **assessingunderstanding**. DO NOT use these words on the assessment site homepage! After you register for the assessment site and choose your own username and password, if you receive a request from Lorraine Graham to complete a teacher registration form (it gets you into the CPM database for newsletters and updates), be sure to reply within one week to retain your assessment site privileges.

Calculus, Second Edition

Calculus, Second Edition, assessments are being revised and expanded from the first edition resources and most of the chapters will be completed this school year.

Math 1-4

We have a dwindling supply of these texts left, but will be able to fill orders throughout the year. For some titles, we will substitute hardbound books at the softbound price if we run out of softbound books. Contact the Business Office for details.



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In the February 2010 Newsletter:

- Application process now open for CPM Summer Assessment Seminars
- Starting an assessment dialogue: Submit student work for discussion
- CPM kicks off assessment initiative
- Chris's Corner:
 - A view from the classroom
 - CPM Contacts
- **Textbook & Curriculum Updates:**
 - Making Connections : Foundations for Algebra, Courses 1 and 2 on track for June release;*
 - Foundations for Algebra, Years 1 and 2; Spanish student books for FFA 1 and 2 and Math 2: FREE!*
 - Web-based assessment resources: All courses;*
 - Calculus, Second Edition; Math 1-4*
- Differentiating the Curriculum for Honors Students
- News Bytes:
 - Resources by course at the CPM web site;
 - Ordering textbooks with 2009-10 funds;
 - Summer workshops;
 - Hotmath offers free Catchup Math Trial;
 - Webinars are coming
- Improving your questioning skills
- Ask a CPM Teacher
- Best practices and the Marzano instructional strategies
- California Corner