

Introduction

HP Hand Held Conferences have a somewhat standard content with the events of registration, introductions, group photograph, user presentations, HP presentations, demonstrations, a programming contest, an HP Q&A panel, best speaker voting, door prize drawing, and a discussion of user community issues including the location of the next HHC. The HHC 2008 committee this year was the same as last year.

- Speakers, Technical program, & banker: Richard J. Nelson <rjnelsoncf@cox.net>
- HHC Web Site: Joseph K. Horn <joehorn@holyjoe.net>
- Historian and Videographer: Jake Schwartz <jakes@pahhc.org>
- European Coordinator: Włodek Mier-Jędrzejowicz <wlodekmj@yahoo.co.uk>
- Registration: Gene Wright <genela@comcast.net>

Sunday is usually the day for the HP Q&A panel, but this event was moved to Saturday to be able to include everyone. Jake Schwartz videotaped the complete conference this year and he gets better and better with each year. He has so much video equipment that it takes a Friday afternoon/evening set up in order to be ready for early Saturday. His video taping area in the Conference room looks like the ABC, CBS, and NBC networks are covering the Conference. He has videotaped so many HHC's that he is moving all his video from tape to DVD. Use the link: <http://www.pahhc.org/video.htm> to his web site that has the HHC video information.

Our normal Conference practice of not charging current HP Calculator Division participants was extended to include HP people present and past from the CVD Calculator Division. This decision was made by the Committee a week or two before the conference and announced on the HHC 2008 web site.

All former employees of the HP Corvallis Division are welcome to attend HHC 2008 without cost.

Fig. 1 – HHC 2008 web site announces that ex CVD employees may attend HHC 2008 at no cost.

We had “remembering when” presentations from three former CVD calculator employees. See photos in the Conclusion. Several presentations were order switched either to have sequential topics together or to adjust to dynamic changes in the schedule – as published on the HHC 2008 web site. All topics on the web-site-published schedule were presented with several last minute additions.

HHC 2008 Web site

Joseph Horn prepares the HHC web site – by hand, he does not use commercial web software – and this year he used a new and clean “calculator like” approach as shown in figure two. The image is vertically compressed to remove excess white space. At the top is a Site Map button so you may verify that you have visited all pages of the



Fig. 2 – HHC 2008 web site is organized using calculator keys.

site. At the bottom is a site visit counter.

If you place your cursor over the top row of six keys you will see a drop down list of choices as shown in figure three.

Because an HHC is dedicated to a one year time period the web site also tracks HP and HP user activities as

provided under the XEQ key. The HHC and the web site are dedicated to recording and preserving HP calculator activity. You may simply change the last digit, “8” in <http://holyojo.net/hhc2008/> to previous years to link to the previous web sites. Recently Joseph has put up a single page for this historical reference purpose. You may add this web address to your book marks to conveniently see all historical HHC web sites and their full contents: <http://holyojo.net/hhc/>. These past web pages are especially useful for their photographs.

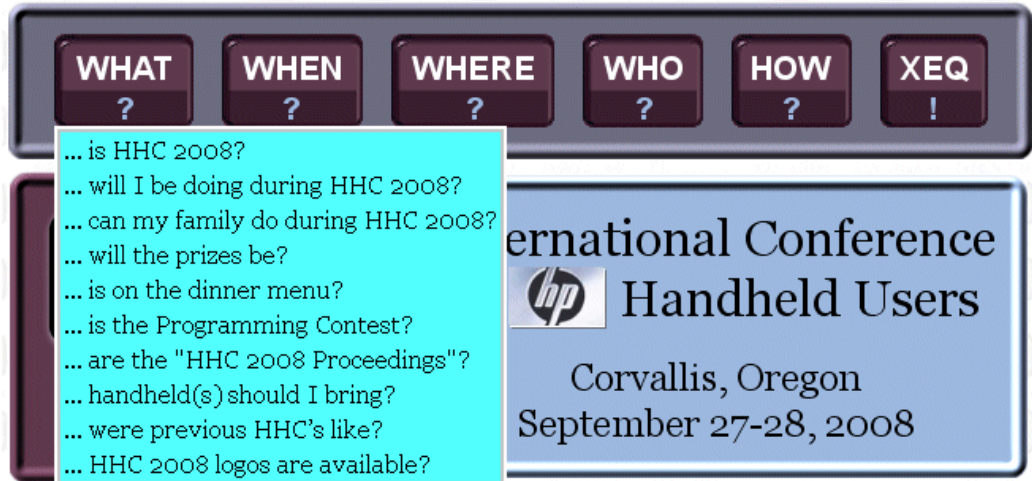


Fig. 3 – HHC 2008 web site typical drop down choice list.

Conference Hotel

The Holiday Inn Express, HIE, was the official HHC hotel located right on the Willamette River. We met our room requirements for the Conference rate (this tidbit is only important for the banker, and as a reference for next year). Figure four shows the entrance and figure five shows the back with a jogger’s path between the hotel and the river. Figures six and seven show additional views of the Willamette River located right behind the Holiday Inn Express.



Fig. 4 – Entrance to the official HHC hotel- HIE.



Fig. 5 – HIE back has a joggers path & then the river.

Breakfast was served at the hotel and this provided an additional opportunity to socialize with Conference attendees. Each year for the last few years Bill Butler has asked for everyone’s comments and signature on the inside of a very nicely made white box. In years past, I would ask him why he wanted the signatures - I was never very clear based on his answers. This “mystery” was solved at the HHC 2008 Monday breakfast. Bill builds the boxes himself using a very nice white stiff cardboard that is available in Canada. He stores his calculators in these boxes as seen in figure nine. Having signatures obtained at

each Conference adds personality to his calculator collection. The various activities of the conference are documented as mentioned in the comments made by the signers.



Fig. 6 – Up river hotel view of the Willamette River.

Fig. 7 – Willamette River boater seen during breakfast.

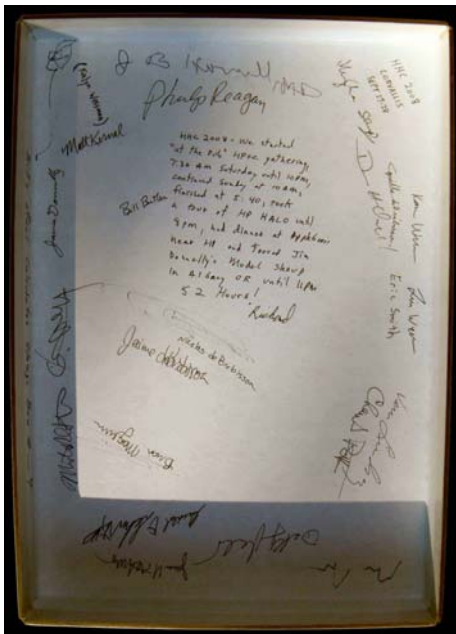


Fig. 8 – Bill Butler's signature box.



Fig. 9 – Bill's boxes house his calculator collection, mystery solved.

Friday Lunch

Everyone arrives at different times. The HHC Committee assembled after 1 PM and everyone was hungry. By the time everyone was ready our group had grown to ten people. We decided to walk to a local restaurant with Sam (before heading for HP to start setting up) when someone mentioned that another group had left earlier. We walked to the place we heard that they had gone, but we did not find them.

These additional and usually spontaneous social events are vital for people to be able to talk one on one in a nice setting. We walked to several restaurants when we could not find the other group. After a few blocks of walking in down town Corvallis, (we walked from the hotel along the river) we picked a place to eat.

Figures 10 through 12 shows the “second” Friday lunch group.



Fig. 10 – Lunch group by Richard.

Fig. 11 – The other table end.

Fig. 12 – Table photo by Jake.

Setting Up On Friday

Getting ready for Saturday’s 7:30 AM registration at an unknown place takes more time than you might expect. Gathering registration materials, unloading and unpacking door prizes, setting up the video equipment, checking out the audio visual aid equipment, and loading attendee thumb drives with 200+ megabytes of files takes hours. Of course good conversation always makes the time go faster and easier. Just finding the right place, being security signed in, and unloaded took nearly an hour.



Fig. 13 – Get prize tables from cafeteria.

Fig. 14 – The overhead projector is OK.

Fig. 15 – Loading the HHC thumb drives.



Fig 16 – Finished at last. Nine colors.

Fig 17 - Jake sets up multiple cameras.

Fig. 18 – These too? Yes, in all four colors.

Friday Dinner

Wlodek organized the Friday evening attendee gathering at a local “pub.” The web site described the event - “[HPCC](#), the British HP calculator club, invites everyone attending HHC2008 to a meeting at McMenamin’s English pub in Corvallis, on the Friday night before HHC2008, from 7pm to 9pm.”

After setting up the Conference room we headed for the pub which was described to me as located across the street from the hotel and three blocks towards the center of town. Arriving at the spot there was no pub. I was riding with Sam with Jake following behind us. In the dark, on a residential side street Sam

went to his trunk for his GPS. We immediately drove straight to McMenamins, where everyone was gathered. <http://www.mcmenamins.com/>

I had another positive GPS “experience” at the “other end” of the Conference during breakfast at HIE Monday morning. Geoff Quickfall demonstrated his Garmin NUVI 250 Portable GPS Car Navigation System. Even without the GPS working it was like having Google Maps or Map Quest in your shirt pocket. In addition to navigation, the NUVI 250 includes many travel tools including a JPEG picture viewer, world travel clock with time zones, currency converter, measurement converter, and calculator. You may also get the addresses of restaurants and gas stations, etc.

Geoff showed the runway where he had marked a point on one of his flights (To Seattle?). Since he is in the cockpit he is able to open the window. It seems that a shielding layer in the window glass blocks the GPS signal. He also marked the gate position and we could see this in surprising detail on the maps loaded into this color touch screened hand held marvel.



Fig. 19 – Table one of the group at McMenamins.



Fig. 20 – Many of the ex-HP CVD folks are at this table.

Conference Facilities

The HP CVD Conference facilities are adjacent to their very large cafeteria. The cafeteria was not being used during the HHC weekend as may be seen in figure 21. The Conference room is just to the right. We used cafeteria space for registration and other uses such as Geoff Quickfall’s exhibit of refurbished



Fig. 21 – Empty CVD cafeteria provides lots of space.



Fig. 22 – Geoff Quickfall’s refurbished HP collection.

Calculators, and Jeremy Smith's work on Polyhedron construction techniques.

Figures 22 and 23 show a display of Geoff Quickfall's refurbished HP calculators. He does this as one of many hobbies from his job as a commercial pilot for Canadian Airlines. He will work on your machine if it needs it. He buys broken machines and uses them as spare parts, etc. The HP-01 is a very popular favorite for refurbishment.

Figure 24 shows Jeremy Smith and Dave Hicks (HP Museum) discussing polyhedron construction with Wlodek Mier-Jedrzejowicz and Eric Smith in the far background.

Registration

Registration was set up outside the Conference room door in the cafeteria. Like last year, I bound the materials that the speakers prepared for their talks. This saves bookshelf space and cost – as long as the labor is donated 😊. We once again used a large Tyvak envelope for the attendees to keep their Conference materials together and organized.



Fig. 23 – Geoff's work close up. He can do yours.

Fig. 24 – Jeremy shows Dave Hicks how it's done.

This report is following the time sequence of the Conference. The first Conference “event” is introducing ourselves followed by a group photo. We seem to be getting better because it took less time (per person) this year than it did last year. Jake video tapes the complete Conference and having these introductions on tape is really great when a question comes up about a person or a topic. One of our Conference objectives is documenting the history of HP's calculator products. Our Videos, proceedings, images, web site, and community articles are all used for this purpose.

This report, for example, is very detailed in order to document and preserve some of the work of the members of the HP Calculator user Community.

Group Photo

Figure 26 shows the same photo as figure 25 with numbers added. The numbered names are listed below figure 25. The group photo is not the best representation of those who attend. Some people arrive late. I took the photo for HHC 2006 and I didn't use a timer so I am not in that photo. Perhaps we should take the photo just before lunch on Saturday as a better time to have as many people as possible. We first took a group photo of the attendees at HHC 2004 in San Jose California. Getting everyone to be seen with



Fig. 25 – Joseph Horn used his new camera with remote control to take this excellent group (42) photo. See text.

- | | | | |
|-----------------------|-------------------------------|--------------------------------|----------------------------|
| 1 Jonathan Horrell | 12 Matt Kernal | 23 Mega Shyam * | 34 Eric Rechlin |
| 2 Jake Schwartz (CM)* | 13 Jim Horn | 24 Joseph Horn (CM)* | 35 Wlodek Mier-Jed. (CM)* |
| 3 Sam Kim (HP)* | 14 Dean Ouchida | 25 Felix Gross * | 36 Detlef Mueller |
| 4 Gene Wright (CM)* | 15 Brian Maguire * | 26 Lora Marschall | 37 Jeff Turner |
| 5 James Unterburger | 16 Eric Smith | 27 Paul Nelson | 38 Stephen Thomas |
| 6 Jeremy Smith | 17 Roger Hill | 28 Dave Hicks | 39 Vern Lindsay |
| 7 Richard Schwartz | 18 Olivier Arbey | 29 Thomas Kline | 40 Geoff Quickfall |
| 8 G.T. Springer (HP)* | 19 Charles Fishburn | 30 Namir Shammas * | 41 Mark Ringrose |
| 9 Bill Butler | 20 Cyrille de Brébisson (HP)* | 31 Andreas Moeller * | 42 Richard J. Nelson (CM)* |
| 10 Michael O'Shea * | 21 Peter Marschall | 32 Pavneet Aruora (Best Spkr)* | |
| 11 Karl Schneider | 22 Roger Hazelden | 33 Allen Thomson | |

Notes: CM – HHC 2008 Committee, HP – Hewlett-Packard Calculator Division, * – Scheduled Speaker



Fig. 26 – Group photo with identification numbers added for identification.

their eyes open and smiling is always a challenge with a big group. Joseph used a wireless remote controlled camera in burst mode to take multiple photos. He selected the one above as the best. See Appendix A for all five of our HHC Group photos on one page and as a single image.

Conference Costs

HHC 2007 and HHC 2008 were hosted by HP in terms of using their facilities without charge to hold the Conference. This keeps the costs down (by about \$ 1,500 or \$ 30 each if 50 people attend) and as explained in the HHC 2007 Report the HHC Calendar project was undertaken. The planned “HHC 2008 Calendar of HP Personal Calculator People” was not completed as planned and the Committee decided on Saturday morning to detach the HHC 2008 Calendar project from the Conference and to simply update the 2008 Calendar for 2009. Jake agreed to do the mailing and the Conference donation was made \$20 to insure the proceedings printing costs, etc. were financially covered. Forty six people donated \$ 20 to attend HHC 2008. See Appendix F for a detailed finance report .

Saturday Presentations

The Conference Schedule is reproduced in Appendix B. I will not discuss each presentation because you may either review the proceedings, or view the video DVDs if you are interested in a particular topic. You may also contact any of the attendees and have them email you a particular presentation because everyone has the all Conference materials on their Conference thumb drive – thanks again HP.

Programming Contest

All attendees received a problem description with their registration materials. This year Gene Wright conducted the contest. He accepted both RPN and RPL solutions. See appendix D for the details. Allen Thomson was the winner.

Sam Kim’s Presentation

Everyone wants to know what is coming, but HP doesn’t discuss specific future plans unless confidentiality is maintained. A one page Confidential Disclosure Agreement was signed by HHC attendees so HP could discuss a few ideas for the future. In addition to Sam giving a view of the future he was also recruiting for two new senior software design engineering positions open at HP. As with any large company there are strict requirements for new hires.

One very interesting aspect of having two identical HP positions open is that Sam is willing to pair the requirements between the two people he wants to hire. Suppose, for example, one applicant has the required education (a specific college degree), but the other doesn’t. He could hire one acceptable person without a degree as long as both applicants together comply with the job description. Several attendees have been talking about this so I am sure that the possibility of HP hiring one of our own is fairly high. Anyone interested should reference requisition # 252421 and contact Sam Kim. See appendix G for a copy of the Conference HP handout.

Lunch

Have you ever attended a party in someone’s home? Usually the guests are spread out among several rooms. If however, you make a quick guest density check you will usually find that the room with the food has the highest guest density. Meals and eating is a big part of human gatherings, especially all day events.

HP not only provided the meeting space, but they also provided all the food that you may require morning to night just a few steps away from the Conference room entrance. The CVD cafeteria is a full function facility offering a wide range of food and drinks. The food court was open to HHC attendees to just walk

in and have what ever they wanted – compliments of HP. This convenience was a vital aspect of our being able to focus our full day on the topic at hand - what is happening in the HP Calculator world.

HP Q & A Panel

One of the more important aspects of traveling to a distant location to attend an HHC is the personal contact you have with others of similar interests.

Part of this is getting to personally know the folks at HP. We frequently have a panel of HP people for general questions and answers from the attendees. This year G.T. Springer (at the left in figure 27) joined the Conference. G.T. Springer is a Product Strategist heavily involved in the Education market.

G.T. demonstrated the StreamSmart 400 and its use in the classroom.



Fig. 27 – G.T., Cyrille, and Sam answer questions from attendees.

Saturday Dinner

Joseph talked to the Chef and obtained a copy of the dinner menu which he immediately posted on the HHC 2008 web site. The Chef’s description follows.

HHC 2008 Dinner Menu

The Saturday Evening HHC Dinner is always a memorable feast. This year’s dinner was hosted by HP (Corvallis Division) in their own banquet room. Wow, it was *incredible!* Here’s the menu:

- **Apricot Glazed Cedar Planked Salmon**
 - Salmon basted with apricot glaze and grilled on cedar planks.
 - Served with a salsa of grilled pineapple, red bell pepper, cider vinegar, cilantro, jicama and scallions.
- **Cranberry Orange Glazed Chicken Breast**
 - Tender chicken breast
 - Basted with a glaze of cranberries, orange juice and zest, parsley and garlic
- **Prosciutto Wrapped Scallions**
 - Sea scallops wrapped with prosciutto ham
 - Basted with butter, lemon, basil and pepper
- **Vegetarian Polenta à la Funghi**
 - Griddled polenta topped with a creamy sauce of crimini, shitake and button mushrooms
 - Polenta: cornmeal, parmesan, butter, garlic and salt
 - Sauce: mushrooms, cream, olive oil, onion, tomatoes, rosemary and sherry
- **Pasta Alfredo**
 - Pasta tossed with a sauce of cream, parmesan and garlic
- **Wild Rice Pilaf**
 - Rice blend with celery, onion and carrot vegetarian
- **Herb Roasted Red Potatoes**

- Garlic, olive oil, parsley, rosemary and scallions vegetarian
- **Vegetable Medley**
 - Fresh seasonal vegetables

Everybody left the banquet hall well satisfied, singing the praises of the chef as we walked back to the Conference room. There were also several different exquisite desserts available, not even shown on the posted menu.

Thanks, HP!

Sunday Mass

We start later on Sunday to allow those who want to attend church to do so. Fr. Joseph conducted a Catholic Mass before the Conference started on Sunday for those who wanted to attend. This mass was done in the same spirit as everything else at an HHC – with meaning and understanding.

Non-Catholics were especially encouraged to attend. Fr. Joseph explained all parts of the Mass and he conducted it in a very personal way. There were many members of other faiths attending and the discussions afterwards mentioned the similarities to other faiths.



Fig. 28. – Fr. Joseph says mass for HHC 2008 attendees.

Special Offers

I have observed a great deal of HP Calculator User Community activities during the last 34 years. One of these “activities” is the production of calculator related materials ranging from overlays to books to software. I view these “commercial” products as a labor of love because no banker would invest in them.

Recent examples are Rick Furr’s 2005 HP Calculator Poster when he presented it at HHC 2005, and Eric Rechlin’s HP 50g serial cable presented last year. An on going “project” is Wlodek’s well known book, *A Guide to HP Handheld Calculators and Computers*. Wlodek brought the Fifth Edition for HHC 2008 and lugged a few copies with him. He offered them for \$20. Eric offered serial cables for \$15.

Personally I always buy these offerings for three reasons. 1) You won’t be able to buy it later for a lower price because of the Conference discount, and there is no shipping charge. 2) You will wish later that you had taken advantage of the special offering at the Conference. 3) You may have difficulty finding the product in the future because these “projects” are usually done because that is the topic of interest at the moment. Since it is not a business there is no need to be “in production.”

Best Speaker

The people who prepare HHC presentations do so because of the Conference spirit of sharing their HP Calculator experiences. OK, I admit to prodding and encouraging them a bit. The annual Conference in

September is also an “excuse” to finish a project that was perhaps started and not finished. Knowing that there are others who are interested is also a good incentive.

Another factor that affects HHC presentations are new products from HP. This year the StreamSmart 400, still not yet readily available, and the HP 20b were of primary interest. This year we had both HP speakers and community speakers give presentations on these products.

Sixteen scheduled speakers were eligible for the best speaker award. We agreed at the Conference this year to exclude HP speakers because they have advantages the other speakers do not have. Twelve of these 16 speakers were mentioned on the best speaker ballots turned in on Sunday afternoon.

Just like the programming contest, we are always concerned with very close or even tying totals – even though this is quite rare. The two runner ups were Joseph Horn (for his research work on calculator displays being used with polarized sunglasses, <http://holyjoe.net/hp/LCD/>), and Charlie Patton for his work on analyzing math education and calculator design.

The speaker voted as best was Pavneet Arora, an HHC traveler from Ontario Canada (near Toronto?). Pavneet compared an HP50g programming approach to the commonly available (in home improvement stores) Construction Master Pro from Calculated industries. The voting was very clear with

Pavneet receiving 50% more votes than the closest runner up.



Fig. 29 Pavneet Arora is voted as best speaker.

Attendee feedback

Since we did not have a survey this year I asked the attendees to write their Conference comments on the Best Speaker Voting form. They are reproduced below.

1. “San Diego was very good and easier to get to for me (From UK) But really enjoyed Corvallis”
2. “next year – Chicago!” *rjn. I wonder who expressed this.*
3. “Enjoyed the conference!”
4. “Lot of very good talks; so difficult to pick best.”
5. “Thanks to Richard and to HP.”
6. “While not directly related to HP calculators the topics presented were interesting to me.”
7. “Kudos to Sam & Co. at HP for the location & great meals/shakes.”
8. “Terrific Conference! HP went beyond expectations and treated us royally. Many thanks!”
9. “Values of β give rise to dom. RIP JSB. You are not expected to understand this.”
10. “I enjoyed the Conference as this is my first. Thanks for a good, if tiring time.” *rjn. We do try to include as much as possible for the invested time. Sleep is for the flight home.*
11. “This was the best conf. I have attended.”
12. “Next year how about Philadelphia or even London?” *rjn. I wonder who expressed this.*
13. “Well Done All!”
14. “I’m fascinated by Physics, enjoyed the presentation very much.”

15. “Well done – can you publish the doc?” rjn. *This refers to Gene’s presentation of Walter Bonin’s creative calculator designs. Yes, Walter’s work was printed in color (thanks Jake for the copies) in the bound proceedings. Walter didn’t provide any additional text.*

Door Prize Drawing

In addition to enjoying a programming contest, the presentation of topics ranging from the Evolution of Dynamic Geometry software, an HP Calculator Ten Commandments, and New Root-seeking Algorithms, HP and the HP Calculator User Community is generous in donating a wide range of prizes to be randomly drawn by each attendee. This year was an exceptional year in that there were three times as many door prizes as attendees. The door prizes are divided into two groups - the premium group and the normal group.

Reg #	Winner	Premium Prize
2	Detlef Mueller	48gII
30	Dave Hicks	41C EEPROM box
25	Gerry Schultz	Geometry Software
16	Lora Marschall	41C System
33	Namir Shammas	71B
43	James Unterburger	41 Touchpad
32	Bill Butler	41C ROMs
3	Jim Horn	Declined
24	Geoff Quickfall	41C Touchpad
1	Richard Nelson	27S Tech. Solutions

A discussion and recommendations from the attendees determine the prizes that are put into the premium group. Usually the highest valued items are included, but others are included because of their rarity. The winner of the programming contest and the best speaker get first pick from the normal group. When the normal group prizes are randomly given out all the tickets are put back into the box and everyone gets a random chance for the premium group.

What should I have taken home?

Often attendees get so involved with what ever is going on around them that they may miss handouts or other items that are made available. Below is a list of what you should have taken home with you if you were always paying attention.

<u>Official items</u>	<u>Unexpected⁽¹⁾</u>
HP20b calculator (HP)	A Modern Difference Engine
HP 10 calculator (HP)	book w/ software*
1 GB HHC 2008 thumb Drive (HP)	The HP 48 Pocket Book*
Bound Proceedings (conf.)	The HP-19B Pocket Book*
Bound Calculator literature list (conf.)	* from/by Jim Donnelly
Programming Contest description (conf.)	Black HP invent coaster – Halo Tour.
Final hpcalc.org CD (Eric Rechlin)	Jeremy’s polyhedron constructions
HP Munchies bag (HP)	Assorted books from Grapevine
HP’s 2 Open Engineering positions, (HP)	
CDA form (HP) (copy if you wished)	
<u>Handouts</u>	
RJN’s HP Calculator Commandments	
JKH’s HP LCD Polarization Angles	

(1) – Quantity was limited. I took many of the extras home (40+ pounds) for next year.

HP Community Discussion

We spent considerably less time on this topic than usual. It seems that the Internet keeps most attendees informed and there are not very many serious issues for HP users these days.

Where should we meet next year?

Sam Kim suggested HP Vancouver, which is in “his backyard.” Travel to Vancouver should be much easier and less expensive than it was to travel to Corvallis.

Based on the pre-Conference Thursday meeting that Wlodek, Sam, Eric Smith, Geoff Quickfall, Hugh Sterns, Roger Hazelden, and I attended in Seattle before HHC 2008 on Thursday evening, the interest by the old Seattle Calculator Group is still very high.

My traveling from Phoenix to either Portland or Seattle is the same cost on Southwest Airlines.

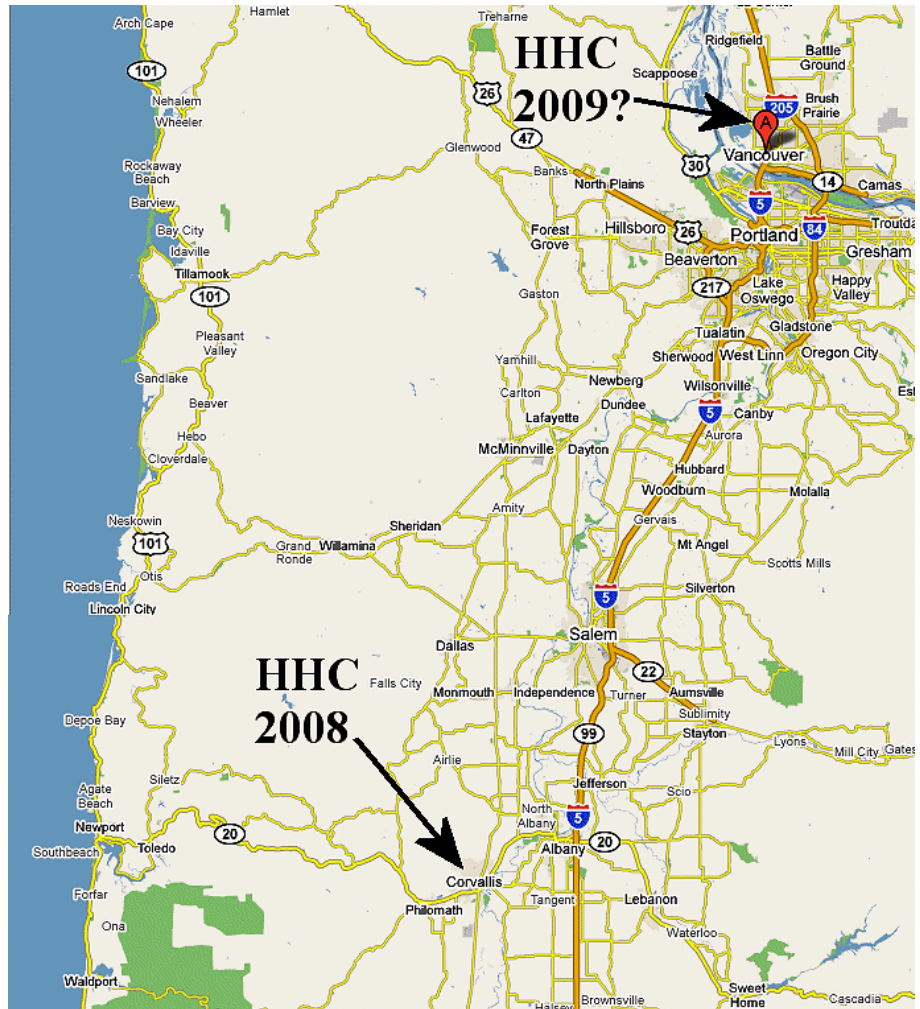


Fig. 30 – NW US map showing HHC 2008 and potential HHC 2009 locations. Vancouver is much easier to get to.

HP R&D Halo Tour

HHC 2008 attendees were invited to two post Conference tours. We cleaned up the conference room, closed it down, and then met our CVD coordinator, Sue Bucknell, in the cafeteria to take a tour of the HP Halo Research and Development area. Bill Wickes, of HP Calculator User Community and HP CVD Calculator fame manages HP Halo. He often says that he has worked on HP’s smallest and now HP’s largest consumer products. Bill was unable to be with us because of previous obligations. Thanks Bill for your generosity.

If you are unfamiliar with HP Halo see:

<http://h71028.www7.hp.com/enterprise/cache/570007-0-0-224-121.html>

The HHC Committee wanted to demonstrate Halo last year, but it didn’t work out in San Diego. We are very happy that we were able to have a demonstration this year. In addition to our visiting among ourselves we also added a third Halo Studio in Porto Rico. The global fiber optic cable that HP uses provides enough bandwidth to make everything seem “live.” I asked the woman in Porto Rico to prove that she was in Porto Rico. She showed the local newspaper with a 9/28/2008 date on it, and we were convinced. Dim Donnelly made the comment that we were no longer just communicating we were

personally relating. There are cheaper Halo imitations, but not of them come even close to the HP Halo image or sound quality.



Fig. 31 – 2nd floor group “visits” with the 1st floor group.



Fig. 32 – An in person meeting just across the conference table.



Fig. 33 – Example of a special camera’s magnification to fill the big screen.

Dinner At Applebees

After the HP Halo tour we gathered at a close by Applebee’s restaurant.



Fig. 34 – Continued conversation.



Fig. 35 – Let’s take a group photo.



Fig. 36 – It is dark, but useable.

One Last (unexpected) tour - Visiting Jim Donnelly’s Model Shop

Most members of the HP User Community have many technical interests, especially when it comes to building things. Jim Donnelly has taken building small things to an extreme in that he has a full machine shop dedicated to building small models. Steam engines, sterling engines, planetary models, and all sorts of mechanical mechanisms are typical of what he builds.

Jim’s machine shop is very well equipped and his work especially involves steel, aluminum, and brass. Gears and intricate mechanisms are often made just for the technical challenge. One example Jim described is the gearing of a miniature planetarium with the various rotational “orbits” accurately driven by complex gears.

His various engines (especially steam engines) are run by compressed air.



Fig. 37 – Jim shows a model as Joseph takes a photograph.



Fig. 38 – Eric takes a photo as everyone is amazed.

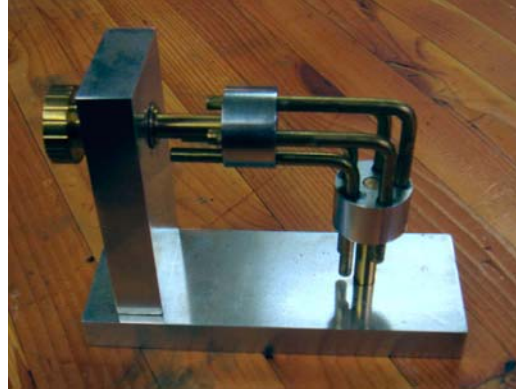
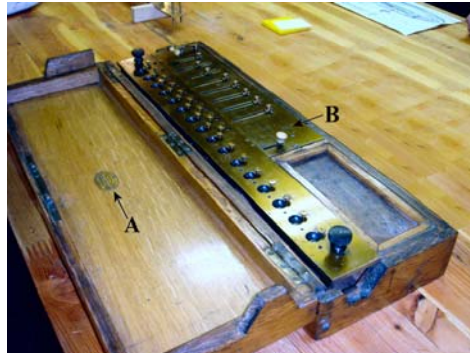


Fig. 39 – Jim mentioned that both he and his wife agreed to buy machines.



Fig. 40 – Jim’s NC mill. Fig. 41 – Right angle shaft mechanism.

Fig. 42 – Assorted working engine designs.



A – Seller’s name plate.

Fig. 43 – Jim’s mechanical calculator.

Fig. 44 – Mechanical calculator close.

B – Paris maker’s serial number.



Based on the photographs above the following people visited Jim Donnelly’s model shop: 1. Pavneet Aruora, 2. Felix Gross, 3. Dave Hicks, 4. Roger Hill, 5. Jim Horn, 6. Joseph K. Horn, 7. Vern Lindsey, 8. Wlodek Mier-Jedrzejowicz, 9. Andreas Moeller, 10. Detlef Mueller, 11. Richard J. Nelson, 12. Geoff Quickfall, 13. Eric Rechlin, 14. Eric Smith, 15. Jeremy Smith, 16. Jeremy’s Girl Friend, 17. Gene Wright.

Monday’s Breakfast

After sleeping in from a full and long Sunday we just managed to squeak in for the Hotel breakfast. Some people did not leave until much later flights. Some of the Monday experience has been previously described under the Conference Hotel section on page two.

My bus for the Oregon Coast didn’t leave until 3 PM. Roger Hill had rented a car so we spent a few hours driving around Corvallis with the idea of getting as high up as possible for a Corvallis city photograph. We didn’t find the idea place.

Conclusion and Observations

This year’s conference was unusual because of its location. Corvallis is not the most convenient place to visit because it is many miles from a large airport. Most people flew into Portland and either took a bus or rented a car.

The historical significance of HP’s calculators having been designed and built in Corvallis, CVD, for over a decade was a strong attraction. We also wanted to celebrate and acknowledge CVD’s work by inviting

all CVD calculator people to attend as our guest. They, Sharon Butterfield, Megha Sham, Jim Donnelly and others gave “remembering when” informal talks and personal discussions that provided a great sense of what it was like to be the Mecca of HP calculators.



Fig. 45 – Sharon Butterfield, 1M\$?



Fig. 46 – CVD calculator history by Jim Donnelly and Megha Sham .



Fig. 47 - Tim, Katie, & '07 youngest attendee.



Fig. 48 - Youngest '08 attendee getting off to an HP20b good start.

Our Conference was truly exceptional this year. It was an intense, fun, friendly, and productive gathering of HP users with a much higher than normal number of current and historical HP calculator people attending. We saw this year how HP is utilizing current technology to give the customer greater value with the ground breaking HP20b. This is a machine designed completely by the “new” team in attendance. The new StreamSmart also falls into this category, and we all got the inside scoop on these products. The future of HP’s calculators looks very bright indeed with HP even recruiting for two new Software Design Engineers.

We decided, at the last moment, to separate the HHC 2009 Calendar project from the Conference because the planned theme wasn’t acceptably complete (perhaps for 2010?). Instead we will use the left over funds from HHC 2007 and produce an updated version of 2008 that blends the two themes, including the HHC 2008 Conference. Jake agreed to handle the shipping and he will make these available when it is

finished and announced. So far it is looking very good. Once again it will include photos of ALL of HP's machines in one place. We expect to be able to considerably reduce the cost this year.

In addition to the normal presentations, demonstrations, and surprises we had two unscheduled tours, both on Sunday. Sue Bucknell gave us a tour of the HP Halo R&D Lab and Jim Donnelly gave us a tour of his Model Shop.

HP provided the meeting facilities and while we have had three HHC's in Corvallis ('81, '88, & '91) this is the first time we used the HP Conference rooms. Thanks again HP, especially Bill Wickes.

For the HHC 2008 HHC Committee,

Richard J. Nelson
November 30, 2008

Photo credits: Gary Friedman, Joseph K. Horn, Jake Schwartz, Richard Schwartz, Richard J. Nelson.

Appendices

- A – HHC Conference Group Photos – 2004 to 2008, 1 page.
- B – Conference Schedule, 2 pages.
- C – Official Registration, 2 pages.
- D – Programming Contest, 6 pages.
- E – Visiting Oregon, 1 page.
- F – Finance Report, 1 page.
- G – HP Software Design Engineer Requisition, 1 page.



Saturday

Time	Event/Person	Description and Notes
7:30 AM ₄₅	Security sign in and Registration. HP name tags issued.	Register with Gene Wright and pick up Conference materials; Bound Proceedings, Special gift, DVDs, etc.
8:15 AM ₁₅	Conference starts, announcements.	Your registration materials are numbered. Save the blue ticket to put into the pot for the door prize drawing. Two other Name labels are included.
8:30 AM ₆₀	Attendee Introductions	Keep short – Name, where from, Machines used, etc. - 30 seconds.
9:30 AM ₃₀	Attendee Group Photo	Tall people at the back. Be sure the camera sees your face.
10:00 AM ₃₀	Brian Maguire	Evolution Of Dynamic Geometry Software
10:30 AM ₁₅	Break	Introduce yourself to a new person.
10:45 AM ₃₀	Sam Kim of HP	HP calculator up date.
11:15 AM ₃₀	Jake Schwartz	Improving Keystroke Efficiency in HP's Recent Business Calculators.
11:45 PM ₂₀	Richard J. Nelson	Fourier StreamSmart 400 probes.
12:05 PM ₅₅	Lunch	HP will provide lunch on site.
1:00 PM ₃₀	G. T. Springer	HP MCL and Data Streaming.
1:30 PM ₃₀	Charlie Patton	Cognitive Science and Calculator Design.
2:00 PM ₃₀	Eric Smith	Calculator Simulation.
2:30 PM ₃₀	Felix Gross	Patent documents: Looking for the History and Future of Calculators
3:00 PM ₃₀	Richard J. Nelson	If I were Wing King
3:30 PM ₃₀	Break	Introduce yourself to a second new person.
4:00 PM ₆₀	HP Panel for General Q & A Sam, Cyrille, GT, (Wing?).	This is your opportunity to "Ask HP" about any aspect of HP's Calculator product line or their policies.
5:00 PM ₃₀	Andreas Moeller	Multi Lingual Pack – Note. Andreas' 8 slides are not in the proceedings because of low contrast (black on gray, etc.)
5:30 PM ₃₀	Joseph Horn	Polarization.
6:00 PM ₆₀	Dinner	HP will provide dinner on site.
7:00 PM ₄₅	HP ex-CVD folks sharing a bit of history.	This will depend on the ex-CVD people being available.
7:45 PM ₃₀	Megha Sham	The Future of Calculators.
8:15 PM ₃₀	Wlodek Mier-Jedrzejowicz	Could Einstein Have Used One? Part II
8:45 PM	End of First Day	Drag off to bed; we don't start as early on Sunday.

Sunday

Time	Event/Person	Description
9:50 AM ₁₀	Conference reconvenes	Announcements, schedule changes, etc.
10:00 AM ₄₅	Cyrille Marie Henry Hervé de Brébisson, HP R&D Manager	The HP20b as a Product Development platform.
10:45 AM ₁₅	Felix Gross	Calculator Literature – 725 documents
11:00 AM ₃₀	Gene Wright	HP20b Flash Programming Demonstration
11:30 PM ₃₀	Namir Shammas	New Root-Seeking Algorithms
12:00 PM ₄₅	Lunch	Same as yesterday.
1:00 PM ₃₀	Karl Schnieder	Suggested Functionality for Successor or Update to the HP-35s
1:30 PM ₃₀	Pavneet Arora	HP50g Construction Applications
2:00 PM ₃₀	Walter Bonin	Walters suggestions will be facilitated by Gene Wright
2:30 PM ₃₀	Michael Oshea	HP-97 and HP-67 Emulator Demo
3:00 PM ₃₀	Break	Ask that last question of your new friends. We are near the end.
3:30 PM ₃₀	Namir Shammas	Shammas Polynomials
3:30 PM ₁₅	Best Speaker Award	Attendees vote.
3:45 PM ₄₅	Door Prize Drawing	Submit your blue ticket and keep your red registration number on your proceedings handy.
4:30 PM ₉₀	User's forum	General HPUC Q & A, suggestions for HHC 2009, Community questions, problems & issues
6:00 PM	Conference Concludes	Have a safe trip home. Join us for breakfast tomorrow morning (usually the next conference is discussed). Time & place to be announced.

We wish to thank Hewlett-Packard for being our gracious host for this year's conference; especially Wing Cheung, Sam Kim, Cyrille Marie Henry Hervé de Brébisson, Bill Wicks, and Sue Bucknell.

Appendix C – Official HHC 2008 Registration Page 1 of 2 pages

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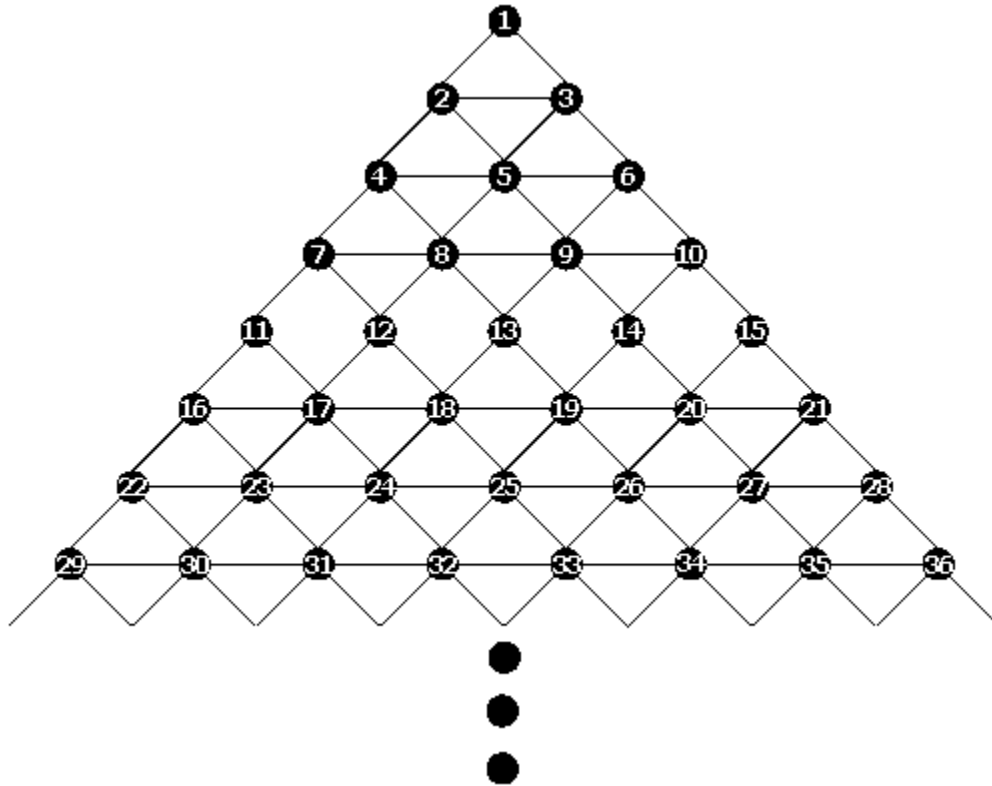
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* paid donation \$20, total = 46 (\$920)

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Gene Wright

Consider the points on a grid of equilateral triangles as shown below. Note that if the points are numbered from left to right and top to bottom, then groups of these points form the vertices of certain geometric shapes. For example, the sets of points 1, 2, 3 and 7, 9, 18 are the vertices of triangles, the sets 11, 13, 24, 26 and 2, 7, 9, 18 are the vertices of parallelograms, and the sets 4, 5, 9, 13, 12, 7 and 8, 10, 21, 34, 32, 17 are the vertices of hexagons.



Write a program named A which will accept a set of points on this triangular grid, analyze it and determine whether the points are vertices of a triangle, parallelogram, hexagon or an illegal figure. In order for a figure to be acceptable, it must meet two conditions:

- 1) Each side of the figure must coincide with an edge in the grid, and
- 2) All sides of the figure must be of the same length.

INPUT: The input will consist of a series of point sets. Each point set will have at most six points in a set. The points in the set are limited to the range of 1 through 105.

35s (or other RPN model): Input will be done one point at a time. Each point will be keyed and R/S will be pressed. A -1 will be entered when all data points are entered and R/S will be pressed. The input for the data set { 1 2 3 } would be SHIFT CLEAR VARS then 1 STO A 2 STO B 3 STO C 1 CHS STO D. Variables A through G might be used in this manner. The last register used (in order) would contain the -1 value. Running the program will be done after storing the inputs by XEQ A ENTER.

50g (or other RPL model): The stack will be clear except for a list containing the data points. The input for the sample data set { 1 2 3 } would be { 1 2 3 } placed on a clear stack. Running the program will be done by pressing: VAR then the menu label A. USER RPL only. No unsupported entry points, System RPL, etc.

OUTPUT:

35s (or other RPN model): Display a 0 if the set is an invalid figure. Display a 1 if the set is a triangle. Display a 2 if the set is a parallelogram. Display a 3 if the set is a hexagon.

50g (or other RPL model): Display "ERROR", "TRIANGLE", "PARALLELOGRAM", or "HEXAGON", appropriately.

TEST: Fastest total time to evaluate a set of input test cases. Decision of the judge is ABSOLUTELY final.

=====

The contest generated only a handful of entries, perhaps because of the apparent complexity of the problem or perhaps because of the full schedule of the conference.

There were two classes of machines eligible: RPL (any) and RPN (any). Only four entries were received, two in each category.

Only one machine (a 50g) correctly solved all input problems. That was the winner of course. Allen Thomson. He correctly solved all 7 input cases in about 12 seconds. Timing wasn't as critical, since his program was the only one that worked in all cases.

One note: The hexagons in the problem are to be regular hexagons - no internal pointing sides.

Perhaps most interestingly, when this problem was posted to the HP Museum forum after the contest, quite a bit of interest ensued. Several of these were posted to the forum at this link:

<http://www.hpmuseum.org/cgi-sys/cgiwrap/hpmuseum/archv018.cgi?read=141243>

A couple of the more interesting programs generated there are reproduced below. Both of these are by Egan Ford.

Fast RPL solution #1

HHC 2008 Programming Contest (and a tip for future UserRPL optimization)
Message #40 Posted on the HP Museum website by Egan Ford on 12 Oct 2008, 12:43 p.m.,

I got the time down to 1.25 seconds for all 7 problems. An incredible 2x+ increase in performance. And that is Gjermund's UserRPL tip: Floats are faster than Ints.

Thanks Gjermund!

The changes:

1. Added a . (dot) after each integer.
2. Converted the input list to floats (I->R after SORT).

```
%%HP: T(3)A(R)F(.);
\<< SORT I\->R \-> p
  \<< "ERROR" p SIZE
    CASE DUP 3. ==
      THEN DROP p OBJ\-> \-> a b c r
        \<<
          b 8. * 1. + \v/ 1. - 2. / CEIL 'r' STO
          c b - b a - >
          IF
          THEN
```


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```

a r r 1. - * 2. / >
IF
THEN
  b a - DUP r 2. * + 1. - * 2. / b + c ==
  IF
  THEN DROP "TRIANGLE DOWN"
  END
END
ELSE
  c r r 1. + * 2. / \<=
  IF
  THEN
    b c b - DUP NEG r 2. * + 1. - * 2. / - a ==
    IF
    THEN DROP "TRIANGLE UP"
    END
  END
END
END
\>>
END DUP 4 ==
THEN DROP p OBJ\-> \-> a b c d r
\<<
c 8. * 1. + \v/ 1. - 2. / CEIL 'r' STO
b r r 1. - * 2. / >
IF
THEN
  c b - DUP r 2. * + 1. - * 2. / c + d ==
  IF
  THEN b c b - DUP NEG r 2. * + 1. - * 2. / - a ==
  IF
  THEN DROP "PARALLELOGRAM DIAMOND"
  END
END
ELSE d c - b a - ==
IF
THEN d r r 1. + * 2. / \<=
IF
THEN
  b 8. * 1. + \v/ 1. - 2. / CEIL 'r' STO
  a r r 1. - * 2. / >
  IF
  THEN
    b a - DUP r 2. * + 1. - * 2. / b + d ==
    IF
    THEN DROP "PARALLELOGRAM LEFT"
    ELSE
      b a - DUP r 1. + 2. * + 1. - * 2. / b + d ==
      IF
      THEN DROP "PARALLELOGRAM RIGHT"
      END
    END
  END
END
END
END
END
\>>
END 6 ==
THEN p OBJ\-> \-> a b c d e f r
\<< f e - b a - ==
IF
THEN f e - 2. * d c - ==
IF
THEN
  f 8. * 1. + \v/ 1. - 2. / CEIL 'r' STO

```

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```

e r r 1. - * 2. / >
IF
THEN
  b 8. * 1. + \v/ 1. - 2. / CEIL 'r' STO
  a r r 1. - * 2. / >
  IF
  THEN
    b a - DUP r 2. * + 1. - * 2. / a + c ==
    IF
    THEN
      r b a - + 'r' STO
      b a - DUP r 2. * + 1. - * 2. / d + f ==
      IF
      THEN DROP "HEXAGON"
      END
    END
  END
END
END
END
END
\>>
END
END
\>>
\>>

```

Fast RPN solution. About 44 seconds on an HP 41CX.

HHC 2008 Programming Contest -- anyone want to try an RPN solution? Message #22 Posted on HP Museum website by Egan Ford on 4 Oct 2008, 3:55 a.m.,

01 LBL "SETUP"	134 *	267 1	400 RCL 02
02 0	135 2	268 +	401 8
03 SETSW	136 /	269 SQRT	402 *
04 CLRG	137 RCL 01	270 1	403 1
05 11	138 X<=Y?	271 -	404 +
06 STO 09	139 GTO 20	272 2	405 SQRT
07 0	140 RCL 02	273 /	406 1
08 RTN	141 RCL 01	274 STO 07	407 -
09 LBL "FS"	142 -	275 FRC	408 2
10 FIX 00	143 ENTER	276 X=0?	409 /
11 CF 29	144 ENTER	277 GTO 09	410 STO 07
12 CLA	145 RCL 07	278 RCL 07	411 FRC
13 >"NUM PTS?"	146 2	279 1	412 X=0?
14 PROMPT	147 *	280 +	413 GTO 13
15 INT	148 +	281 INT	414 RCL 07
16 STO 00	149 1	282 STO 07	415 1
17 1000	150 -	283 LBL 09	416 +
18 /	151 *	284 RCL 07	417 INT
19 1	152 2	285 1	418 STO 07
20 +	153 /	286 -	419 LBL 13
21 STO 10	154 RCL 02	287 RCL 07	420 RCL 07
22 LBL 00	155 +	288 *	421 1
23 CLA	156 RCL 03	289 2	422 -
24 >"PT "	157 X#Y?	290 /	423 RCL 07
25 ARCL 10	158 GTO 20	291 RCL 01	424 *
26 >"?"	159 CLA	292 X<=Y?	425 2
27 PROMPT	160 >"TRIANGLE DOWN"	293 GTO 20	426 /
28 INT	161 2	294 RCL 02	427 RCL 01
29 STO IND 10	162 STO 08	295 RCL 01	428 X<=Y?
30 ISG 10	163 GTO 20	296 -	429 GTO 20
31 GTO 00	164 LBL 06	297 ENTER	430 RCL 06
32 RUNSW	165 0	298 ENTER	431 RCL 05
33 FIX 04	166 4	299 RCL 07	432 -
34 RCL 00	167 X#NN?	300 2	433 ENTER

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35 1000	168 GTO 11	301 *	434 ENTER
36 /	169 RCL 03	302 +	435 RCL 07
37 1	170 8	303 1	436 2
38 +	171 *	304 -	437 *
39 SIGN	172 1	305 *	438 +
40 LBL 01	173 +	306 2	439 1
41 LASTX	174 SQRT	307 /	440 -
42 LASTX	175 1	308 RCL 02	441 *
43 RCL IND L	176 -	309 +	442 2
44 LBL 02	177 2	310 RCL 04	443 /
45 X<=NN?	178 /	311 X#Y?	444 RCL 01
46 GTO 03	179 STO 07	312 GTO 10	445 +
47 X<>Y	180 FRC	313 CLA	446 RCL 03
48 STO Y	181 X=0?	314 >"PARALLELOGRAM"	447 X#Y?
49 RCL IND X	182 GTO 07	315 >" LEFT"	448 GTO 20
50 LBL 03	183 RCL 07	316 4	449 RCL 06
51 ISG Y	184 1	317 STO 08	450 RCL 05
52 GTO 02	185 +	318 GTO 20	451 -
53 X<> IND L	186 INT	319 LBL 10	452 ST+ 07
54 STO IND Z	187 STO 07	320 1	453 ENTER
55 ISG L	188 LBL 07	321 ST+ 07	454 ENTER
56 GTO 01	189 RCL 07	322 RCL 02	455 RCL 07
57 CLA	190 1	323 RCL 01	456 2
58 >"ERROR"	191 -	324 -	457 *
59 0	192 RCL 07	325 ENTER	458 +
60 STO 08	193 *	326 ENTER	459 1
61 0	194 2	327 RCL 07	460 -
62 3	195 /	328 2	461 *
63 X#NN?	196 RCL 02	329 *	462 2
64 GTO 06	197 X<=Y?	330 +	463 /
65 RCL 02	198 GTO 08	331 1	464 RCL 04
66 8	199 RCL 03	332 -	465 +
67 *	200 RCL 02	333 *	466 RCL 06
68 1	201 -	334 2	467 X#Y?
69 +	202 ENTER	335 /	468 GTO 20
70 SQRT	203 ENTER	336 RCL 02	469 CLA
71 1	204 RCL 07	337 +	470 >"HEXAGON"
72 -	205 2	338 RCL 04	471 6
73 2	206 *	339 X#Y?	472 STO 08
74 /	207 +	340 GTO 20	473 LBL 20
75 STO 07	208 1	341 CLA	474 STOPSW
76 FRC	209 -	342 >"PARALLELOGRAM"	475 RCL 08
77 X=0?	210 *	343 >" RIGHT"	476 STO IND 09
78 GTO 04	211 2	344 5	477 1
79 RCL 07	212 /	345 STO 08	478 ST+ 09
80 1	213 RCL 03	346 GTO 20	479 AVIEW
81 +	214 +	347 LBL 11	480 RTN
82 INT	215 RCL 04	348 0	481 LBL "PRINT"
83 STO 07	216 X#Y?	349 6	482 RCL 09
84 LBL 04	217 GTO 20	350 X#NN?	483 1
85 RCL 02	218 RCL 03	351 GTO 20	484 -
86 RCL 01	219 RCL 02	352 RCL 06	485 1000
87 -	220 -	353 RCL 05	486 /
88 RCL 03	221 ENTER	354 -	487 11
89 RCL 02	222 ENTER	355 RCL 02	488 +
90 -	223 CHS	356 RCL 01	489 STO 10
91 X>Y?	224 RCL 07	357 -	490 LBL 21
92 GTO 05	225 2	358 X#Y?	491 CLA
93 RCL 07	226 *	359 GTO 20	492 RCL IND 10
94 1	227 +	360 RCL 06	493 30
95 +	228 1	361 RCL 05	494 +
96 RCL 07	229 -	362 -	495 INT
97 *	230 *	363 2	496 GTO IND X
98 2	231 2	364 *	497 LBL 30

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99 /	232 /	365 RCL 04	498 >"ERROR"
100 RCL 03	233 RCL 02	366 RCL 03	499 GTO 40
101 X>Y?	234 X<>Y	367 -	500 LBL 31
102 GTO 20	235 -	368 X#Y?	501 >"TRIANGLE UP"
103 RCL 03	236 RCL 01	369 GTO 20	502 GTO 40
104 RCL 02	237 X#Y?	370 RCL 06	503 LBL 32
105 -	238 GTO 20	371 8	504 >"TRIANGLE DOWN"
106 ENTER	239 CLA	372 *	505 GTO 40
107 ENTER	240 >"PARALLELOGRAM"	373 1	506 LBL 33
108 CHS	241 >" DIAMOND"	374 +	507 >"PARALLELOGRAM"
109 RCL 07	242 3	375 SQRT	508 >" DIAMOND"
110 2	243 STO 08	376 1	509 GTO 40
111 *	244 GTO 20	377 -	510 LBL 34
112 +	245 LBL 08	378 2	511 >"PARALLELOGRAM"
113 1	246 RCL 04	379 /	512 >" LEFT"
114 -	247 RCL 03	380 STO 07	513 GTO 40
115 *	248 -	381 FRC	514 LBL 35
116 2	249 RCL 02	382 X=0?	515 >"PARALLELOGRAM"
117 /	250 RCL 01	383 GTO 12	516 >" RIGHT"
118 RCL 02	251 -	384 RCL 07	517 GTO 40
119 X<>Y	252 X#Y?	385 1	518 LBL 36
120 -	253 GTO 20	386 +	519 >"HEXAGON"
121 RCL 01	254 RCL 07	387 INT	520 LBL 40
122 X#Y?	255 1	388 STO 07	521 AVIEW
123 GTO 20	256 +	389 LBL 12	522 ISG 10
124 CLA	257 RCL 07	390 RCL 07	523 GTO 21
125 >"TRIANGLE UP"	258 *	391 1	524 FIX 06
126 1	259 2	392 -	525 RCLSW
127 STO 08	260 /	393 RCL 07	526 CLA
128 GTO 20	261 RCL 04	394 *	527 >"TIME: "
129 LBL 05	262 X>Y?	395 2	528 ATIME24
130 RCL 07	263 GTO 20	396 /	529 AVIEW
131 1	264 RCL 02	397 RCL 05	530 RTN
132 -	265 8	398 X<=Y?	531 END
133 RCL 07	266 *	399 GTO 20	

Appendix E - Visiting the Central Oregon Coast Page 1 of 1 page

Richard J. Nelson, September 30 to October 2, 2008



Fig. 1 – Walking the Oregon Coast South of Waldport.



Fig. 2 –The waves are high due to a Southern storm.



Fig. 3 – Some beach houses are quite nice. Don't throw stones.



Fig. 4 – Wild blackberries abound and tasty.



Fig. 5 – Glass blowing is common.



Fig. 6 – Whale watching is very popular here.



Fig. 7 – Tillamook Cheese

Appendix F – HHC 2008 Finance Report Page 1 of 1 page

Income: Donation from 46 attendees of \$20 each. \$ 920.00

Expenses:

1. Circuit City, Ink, HP C4150	\$ 53.00
2. Harbor Freight, door prizes (E1)	\$ 17.27
3. Paper Plus, Envelopes, labels, proceedings covers, staples, etc.	\$ 97.03
4. Office Max copying of Proceedings @0.04 per page	\$ 270.00
5. Fed Ex shipping (using employee account for discount) materials to Corvallis, etc.	\$ 156.00
6. Borders And Books, door prizes B1-B6, C8	<u>\$ 50.00</u>
Total	\$ 643.30

Thanks to Jake Schwartz who supplied the “Imagine . . .” color pages for the proceedings.

Thanks to Eric Rechlin who supplied the Felix Gross Calculator Reference literature List pages.

Excess applied to the HHC 2008 Calendar project. \$ 920.00 – 643.30 = \$ 276.70

Excess carried over from HHC 2007 (Appendix F of HHC 2007 Conference Report) \$ 969.01

Total \$ 1,245.71

The HHC 2008 Conference Committee decided, in Corvallis, to separate the planned HHC 2009 Calendar project from the conference because the calendar was not adequately completed in accordance with the plan. Instead the Committee decided that the Calendar will be completed as an updated version of the HHC 2008 calendar. The remaining funds are to be used for printing 150 copies of the Calendar using the \$1, 245.71 as seed money. Jake will take care of orders and shipping the calendar.

Richard J. Nelson
November 30, 2008

Calculating Solutions Design Engineer (2 positions) - 252421

Business Environment

hp has the world's second largest computer research laboratory. We invent new technologies and innovative information products. Change markets. Create business opportunities. We also help to plan and broaden company strategy, and deliver the science and technology that achieves it. And that gives hp leadership. We're focused on e-services ... technologies and solutions. On internet and computing platforms, printing and imaging technologies, storage and intelligent information appliances, and we're chasing down broader alternative technologies and basic research. On manufacturing sites we turn foundation technology from hp labs into real solutions. We're getting smarter. Acting sharper. Moving faster. Getting people *off* the bench and into customer sites to speed up time to market. Heading for zerotime technology transfer. At hp, we in r&d don't just dream about the future. We invent it.

Job Description

Software Design Engineers play lead roles in multi-discipline teams working on new products and solutions. You'll be part of a team that architects, designs, implements, tests, and validates software for HP Calculators, including RPN/RPL programming, embedded FW systems, Windows and Windows CE applications, as well as web-enabled calculator applications, ensuring that users fully understand and optimize technology. You will also be involved in the selection, configuration, and integration of software development or support tools. Finally, you will also present software solutions and support customers in their use.

You will be responsible for the design, development, maintenance, testing, and quality and performance assurance of system software products. You will make changes to system software to correct errors in the original implementation and create extensions to existing programs to add new features or performance improvements. Additionally, innovation is key as you design and develop major functional and performance enhancements for existing products and produce new software products and tools. You will review requirements, specifications, and designs to assure product quality and will develop and implement plans and tests to ensure product quality and performance assurance.

Qualifications Education

Bachelor's (undergraduate), Master's (graduate), or Ph.D. (post graduate) degree in **computer computer science, computer engineering, or electrical engineering**.

Experience and knowledge

Six or more years of application and driver (DDK) development experience using C/C++ in a PC Windows XP and Vista environments. 2 or more years of application and driver development in Windows CE/Windows Mobile environments. Leading and working with cross-functional teams as well as practical experience in all phases of the software development lifecycle. Must possess expert knowledge (development and application) in Windows and WinCE/Mobile operating systems. Expertise in multiple programming languages and technologies such as RPL/RPN, Java, embedded systems, firmware, assembly, Perl, Shells Script/Korn Shell, USB, MacOS, and Linux will

be advantageous. Experience in teaching mathematics, PCB/electronics design experience, and microprocessor knowledge will be helpful. In the end, **unmitigated passion for HP Calculators** will be critical.

Skills

Software architecture, development, and debugging skills Strong project management and leadership skills

Analytic ability in order to research technical issues and generate creativelinnovative solutions Ability to work on complex problems and projects

Exercise independent judgment within a fast paced HP Calculator's highly entrepreneurial culture Rapid learner who can mentor others to bring them along on technologies very specific to handheld calculators

Fluent in English.

RJ Note. In longer previous descriptions published elsewhere, there was a note at the end - relocation is not required.