

Coming to Richmond in 2007—

NCTM Regional Conference and Exposition!

The GRCTM, in conjunction with the VCTM, is proud to be the local host of the NCTM Regional Conference and Exposition on October 11-13, 2007. We are gearing up for a wonderful conference at the new Richmond Convention Center.

**NCTM Regional
Conferences**

☺ **SAVE THIS DATE** ☺

Let's use this as an opportunity to showcase the expertise of the Richmond Mathematics community. We do special things every day! Consider presenting alone or with others at this conference. Let's share with the rest of the region.

Presenter proposals can be submitted at www.nctm.org/speak.

The deadline for proposals is July 10, 2006.

Answer to Coin Problem (p. 4): Let us designate the coins A through G. Of coins A through F, at least one is heavy—perhaps two. We weigh ABC against DEF. If the pans balance, each group of three contains one heavy coin. In this case we weigh A against B (if they balance, C is heavy; if they don't, the pan that goes down holds the heavy coin) and then D against E (the same procedure). Total: three operations.

If the pans do not balance when weighing ABC against DEF—let us say ABC is heavier—it is because ABC contains one or two heavy coins. We weigh A against B. If A is heavier it is the first heavy coin, and the second will be found by weighing C against G. If the pans balance, the heavy coins are either A and B or C and G. The two pairs must be weighed against each other. Again, only three operations are necessary.

The tantalizing and compelling pursuit of mathematical problems offers mental absorption, peace of mind amid endless challenges, repose in activity, battle without conflict, 'refuge from the goading urgency of contingent happenings,' and the sort of beauty changeless mountains present to senses tried by the present-day kaleidoscope of events.

Morris Kline


Mathematics in Western Culture, p. 470

Oxford University Press © 1953

as quoted in Rosemary Schmalz, *Out of the Mouths of Mathematicians*, #20, p. 53

Math. Asso. America, © 1993

Answer to Alice's Multiplication Tables (p.2):

$4 \times 5 = 12$	20 base 18	$4 \times 9 = 16$	16 base 30	
$4 \times 6 = 13$	24 base 21	$4 \times 10 = 17$	40 base 33	
$4 \times 7 = 14$	28 base 24	$4 \times 11 = 18$	44 base 36	
$4 \times 8 = 15$	32 base 27	$4 \times 12 = 19$	48 base 39	
		$4 \times 13 \neq 20$	52 base 42	1T is 52 in base 42
				What does 20 equal in base 42?