



Bilkent University  
Department of Mathematics

## PROBLEM OF THE MONTH

**Term:** May 2005

Find the maximum and minimum of  $|a - b| + |b - c| + |c - a|$ , if integer numbers  $a$ ,  $b$ , and  $c$  satisfy the following relation:

$$(a - b)^3 + (b - c)^3 + (c - a)^3 = 60$$