a	b	C	d	е	f
g			h	in L.	i sibin
i			j	91118	161 Y
k		m	n	3 100 1	or Local in
0	.139		р		a bas *
q				r	
S	18 14 7	id sM .	a viis a mo	2 8 77	

CROSS NUMBER
Contributed by P. Diacono
of St. Joseph's College

## **ACROSS**

- (a) The cube of (j) across.
- (g) The product of a 2 digit number and the same number reversed.
- (h) A power of 2.
- (i) The difference between the sum of the digits on the left hand half of the cross number and the sum of the digits on the right hand half.
- (j) Three consecutive integers.
- (k) A multiple of 25.
- (n) Divisible by 11.
- (o) The square of a prime number.
- (p) The product of four of the first five prime numbers.
- (q) A multiple of (r) across.
- (r) A prime number.
- (s) 907<sub>(base 10)</sub> written to another base.

## DOWN

- (a) Divisible by 11.
- (b) Each digit is greater than the next one below it.
- (c) A perfect cube.
- (d) A multiple of both (c) down and (o) across.
- (e) The first three digits are the same (and in the same order) as the last three digits; and the middle digit is the sum of the first three digits.
- (f) Each digit is less than 8.
- (m) The digits of the binary system.

Note: 0 may begin a list of digits (e.g. 0, 1, 2, ...) but may not begin a number (e.g.  $3^2 = 09$ ). Solution in Vol. 10 No. 2.