

Fig 2.9 (Partial) Total of 7 Detailed Formats

	Instruction formats	Example
1. ld, st, la, addi, andi, ori		ld r3, A ($R[3] = M[A]$) ld r3, 4(r5) ($R[3] = M[R[5] + 4]$) addi r2, r4, #1 ($R[2] = R[4] + 1$)
2. ldr, str, lar		ldr r5, 8 ($R[5] = M[PC + 8]$) lar r6, 45 ($R[6] = PC + 45$)
3. neg, not		neg r7, r9 ($R[7] = -R[9]$)
4. br		brzr r4, r0 (branch to $R[4]$ if $R[0] == 0$)
5. brl		brlnz r6, r4, r0 ($R[6] = PC$; branch to $R[4]$ if $R[0] \neq 0$)
6. add, sub, and, or		add r0, r2, r4 ($R[0] = R[2] + R[4]$)
7. shr, shra shl, shic	7a style="text-align: center;"> 7b style="text-align: center;">	shr r0, r1, #4 ($R[0] = R[1]$ shifted right by 4 bits) shl r2, r4, r6 ($R[2] = R[4]$ shifted left by count in $R[6]$)
8. nop, stop		stop