## Table 5.3. MIPS Registers

| Register Number | Conventional Name | Usage |
|---|---|---|
| $0 | $zero | Hard–wired to 0 |
| $1 | $at | Reserved for pseudo–instructions |
| $2 – $3 | $v0, $v1 | Return values from functions |
| $4 – $7 | $a0 – $a3 | Arguments to functions – not preserved by subprograms |
| $8 – $15 | $t0 – $t7 | Temporary data, not preserved by subprograms |
| $16 – $23 | $s0 – $s7 | Saved registers, preserved by subprograms |
| $24 – $25 | $t8 – $t9 | More temporary registers, not preserved by subprograms |
| $26 – $27 | $k0 – $k1 | Reserved for kernel. Do not use. |
| $28 | $gp | Global Area Pointer (base of global data segment) |
| $29 | $sp | Stack Pointer |
| $30 | $fp | Frame Pointer |
| $31 | $ra | Return Address |
| $f0 – $f3 | – | Floating point return values |
| $f4 – $f10 | – | Temporary registers, not preserved by subprograms |
| $f12 – $f14 | – | First two arguments to subprograms, not preserved by subprograms |
| $f16 – $f18 | – | More temporary registers, not preserved by subprograms |
| $f20 – $f31 | – | Saved registers, preserved by subprograms |