



$\langle \text{assign} \rangle ::= \text{id} := \langle \text{exp} \rangle$

```

    GETA ( <exp> )
    generate [STA    S(id)]
    REGA := null

```

$\langle \text{exp} \rangle ::= \langle \text{term} \rangle$

```

    S(<exp>) := S(<term>)
    if S(<exp>) = rA then
        REGA := <exp>

```

$\langle \text{exp} \rangle_1 ::= \langle \text{exp} \rangle_2 + \langle \text{term} \rangle$

```

    if S(<exp>_2) = rA then
        generate [ADD    S(<term>)]
    else if S(<term>) = rA then
        generate [ADD    S(<exp>_2)]
    else
        begin
            GETA (<exp>_2)
            generate [  ADD    S(<term>)]
        end
    S(<exp>_1) := rA
    REGA := <exp>_1

```

Figure 5.19 Code generation for an assignment statement.