6-9. 0010 000 0 0000 0101 LD R0, Z

0010 001 0 0000 0101 LD R1, C

1111 0000 0010 0001 LOOP TRAP x21

0001 001 001 1 11111 ADD R1, R1, #-1

0000 001 111 1 11101 BRP LOOP

1111 0000 0010 0101 TRAP x25

0000 0000 0101 1010 Z. FILL x005A

0000 0000 0110 0100 C. FILL x0064

6-10. 0101 000 010 1 00001 AND R0, R2, #1

0000 010 0 0000 1111 BRz

IF EVEN, THEN BRANCH TO PC+1111

6-15. 0111 010 100 000 111 STR R2, R4, #7

7-2. 0010 0011 1111 1111

7-3. AND is an opcode so it won't be found during the 1st Pass.

7-4.

Symbol	Address
TEST	x301F
FINISH	x3027
SAVE3	x3029
SAVE2	x302A

7-7.

```
        .ORIG x3000
        AND   R1, R1, #0
        AND   R2, R2, #0
        ADD   R2, R2, #1
        LD    R3, COUNT
LOOP    AND   R4, R0, R2
        BRz   ISO
        ADD   R1, R1, #1
ISO     ADD   R3, R3, #-1
        BRp   LOOP
        HALT
COUNT   .FILL #16
        .END
```

7-10. ADD R3, R3, #30. 30 is too large to store in the instruction split 30 into two 15. So that it can achieve the same effect. When it's assembled

7-23. (a) ADD R1, R1, #-1

(b) LDR R4, R1, #0

(c) ADD R0, R0, #1

(d) ADD R1, R1, #-1

(e) BR LOOP