

1.

- a. PUSH            {R4, R5}  
   LDRD           R2, R3, [R0], 8  
   LDRD           R4, R5, [R1], 8  
   ADDS           R2, R2, R4  
   ADCS           R3, R3, R5  
   STRD           R2, R3, [R0], 8  
   POP            {R4,R5}
- b. LDRD           R1, R2, [R0], 8  
   SUB            R1, R1, 5  
   STRD           R1, R2, [R0], 8
- c. MUL            R3, R0, R1  
   STR            R3, R2
- d. MUL            R3, R0, R1  
   STR            R3, R2
- e. SDIV           R3, R0, R1  
   STR            R3, R0
- f. UDIV           R3, R0, R1  
   STR            R3, R0
- g. SDIV           R3, R0, R1  
   MLS            R0, R1, R3, R0  
   STR            R0, R2

2.

MUL            R4, R1, R1  
MUL            R5, R0, R2,  
LS              R6, 4  
CUT            R6, R6  
MUL            R5, R5, R6  
NEG            R4, R4, R5

3.

- a. MUL            R0, R0, R1  
   MUL            R0, R0, R2  
   BX            LR
- b. uint32\_t a = 1  
   uint32\_t b = 2  
   uint32\_t c = 3  
   printf ("Answer:", a\*b\*c)  
   printf ("Function:", Volume(a, b, c))